DANIEL D. GARCIA

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EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Cambridge, MA

B.S. in Computer Science, 1990 B.S. in Electrical Engineering, 1990

UNIVERSITY OF CALIFORNIA, BERKELEY

Berkeley, CA

M.S. in Computer Science, 1995

Ph.D. in Computer Science, 2000. Area: computer graphics and scientific visualization. Brian Barsky, advisor.

Completed the Spring 2020 College of Engineering EMPOWER: Grading for Equity learning module

TEACHING AWARDS

- Outstanding Graduate Student Instructor in Computer Science (1992)
- Electrical Engineering and Computer Science Outstanding Graduate Student Instructor (1997)
- Computer Science Division Diane S. McEntyre Award for Excellence in Teaching (2002)
- Computer Science Division IT Faculty Award for Excellence in Undergraduate Teaching (2005)
- UC Berkeley "Everyday Hero" Award (2005)
- Highest "teaching effectiveness" rating for any EECS lower division instructor, ever (6.7, since tied) (2006)
- CS10: The Beauty and Joy of Computing chosen as 1 of 5 national pilots for AP CS: Principles course (2010)
- CS10: The Beauty and Joy of Computing chosen as a University of California Online Course Pilot (2011)
- Association of Computing Machinery (ACM) Distinguished Educator (2012)
- Top 5 Professors to Take Classes with at UC Berkeley, The Black Sheep Online (2013)
- CS10 becomes first introductory computing class at UC Berkeley with > 50% women (2013,2014)
- Ten Most Popular MOOCs Starting in September 2015 and January 2016, Class Central (2015, 2016)
- LPFI's Lux Award for being "Tech Diversity Champion" (2015)
- NCWIT's Undergraduate Research Mentoring (URM) Award (2016)
- NCWIT's Extension Services Transformation Award, Honorable Mention (2016)
- CS10 becomes first introductory computing class at UC Berkeley with > 60% women (2017)
- SAP Visionary Member Award (2017)
- Google CS4HS Ambassador (2017)
- CS10 becomes first introductory computing class at UC Berkeley with > 63% women (2018)
- Recognized as the most prolific author in the 50-year history of ACM SIGCSE (2019)
- Association of Computing Machinery (ACM) Distinguished Speaker (2019-2022)

TEACHING INTERESTS

Core CS introductory curricula (CS10, CS61[abc]), CS teaching techniques (CS30[12] ... now CS375), self-paced programming classes (CS9[a-h], CS47[abc]), social implications of computing (CS195), game theory ("GamesCrafters" CS198, Math274), computer animation ("UCBUGG" CS198, CNM190 [now NWMEDIA 190], CS39a), iOS Development (CS198), and computer graphics (CS184).

ACADEMIC HONORS

- Eastman Kodak Minority Scholarship for Academic Excellence (1986-1989)
- National Consortium for Graduate Degrees in Engineering (GEM) Fellowship (1989-1992)
- Irving and Lucile Smith Scholarship (1991-1992)
- National Science Foundation Minority Graduate Fellowship (1993-1996)
- Dept. of Education Graduate Assistance in Areas of National Need Fellowship (1998-1999)

TEACHING EXPERIENCE

LECTURER, UC BERKELEY (Fa00-Sp03)

Berkeley, CA

ASSISTANT TEACHING PROFESSOR (LECTURER PSOE), UC BERKELEY (Fa03-Sp06)

Berkeley, CA

ASSOCIATE TEACHING PROFESSOR (LECTURER SOE), UC BERKELEY (Sp06-Sp12)

Berkeley, CA

TEACHING PROFESSOR (SENIOR LECTURER SOE), UC BERKELEY (Sp12-present)

Berkeley, CA

Computer Science 39n/10 The Beauty and Joy of Computing (BJC)

Designed and piloted new non-majors course with fellow Lecturer SOE Brian Harvey (CS), TAs Colleen Lewis and George Wang, and other student developers. This involved co-creating 30 two-hour labs, 25 one-hour lectures, 5 homework assignments, two multi-week projects, and one term paper assignment. Introduced pair programming and added with-computer (i.e., Scratch IDE) exams. This course has already gained distinction. It was selected as a Bears Breaking Boundaries winner for its innovative curriculum, a Lockheed Martin \$50k Broadening Participation grant winner, was twice chosen as one of the national pilots for the new College Board Advanced Placement computing course "Computer Science: Principles", and as a UC Online Instruction Pilot Project course, offered Fall 2012 as CSW10. Over two years, developed BJC into four edX MOOC courses (BJC.1x-BJC.4x) with a team of undergraduates and MS students. This involved recording all course lectures, converting all existing labs, and creating auto-grading exercises and projects. Launched it three consecutive academic years (starting Fa15 and finishing Sp18) to 24K, 2.8K and 2.1K learners; this involved managing the course forum, holding online office hours, and coordinating remote TAs. It continues to run as a self-paced course on edX. In the Sp13 we achieved a historic milestone: it was the first time a UC Berkeley intro computing course had > 50% women! In Sp17 we continued to break UC Berkeley records with > 60% women enrolled, and in Sp18 we believe we were the most gender diverse university-level introductory computing course in the nation with 63% women enrolled. In Sp20 (in response to the COVID pandemic), pivoted the class online: required weekly check-ins to make sure no student was falling behind or struggling, dropped midterm exam and project, and allowed untimed, unproctored final exam. In Fa20, put in significant effort (worked every single weekend, all weekend) to create archival MOOC-style lecture videos with accompanying lecture quizzes, and author 3 exams in PrairieLearn using randomized question generators; these questions may be reused in later semesters. Developed many new student-centric policies: exams were untimed, multi-day, and open book with authentic Snap! and Python coding questions, and we created a generous "no student will fail this course" incomplete policy, allowing struggling students to pause the class and continue the following

semester. These were very well-received, and the course ratings were the highest in 5 years. My Head TA (later summer co-instructor) won "Extraordinary Teaching in Extraordinary Times" award, due to the policies we instituted in Sp20 that he added upon in Su20; I was also nominated for that prestigious award. Ratings: 6.1 (Fa09), 6.4 (Fa10), 6.5 (Sp11), 6.6 (Fa11), 6.5 (Sp12), 6.7 (Fa12), 6.5 (Sp13), 6.4 (Fa13), 6.3 (Sp14), 6.2 (Sp15), 6.3 (Fa16), 6.5 (Sp17), 6.3 (Fa17), 6.5 (Sp18), 6.27 (Fa18), 6.33 (Sp19), 6.04 (Fa19), 6.56 (Sp20), 6.48 (Fa20), 6.32 (Sp21)

Computer Science 3 Introduction to Symbolic Programming

Designed full online lecture notes for two different books, implemented web-based grading software, designed several new graphic fractal and MapReduce lectures, labs and assignments, designed entirely new final project "GAMESMAN: Shall We Play a Game?" incorporating game theory and basic computer graphics. It was selected as a "Nifty Assignment" and presented at the Spring 2002 SIGCSE Conference. Ratings: 6.3 (Fa02), 6.0 (Sp01), 6.0 (Fa01), 6.3 (Fa02), 5.5 (Sp03), 6.2 (Fa03), 6.3 (Fa08), 5.9 (Sp09).

Computer Science 4 Introduction to Computing for Engineers

Designed and piloted entirely new course for College of Engineering with Kathy Yelick (CS) and David Auslander (ME). This involved co-creating 30 two-hour labs, 30 lectures, 15 homework assignments and an end-of-semester project: a lunar lander simulation. Introduced pair programming and added with-Java IDE exams; feedback for these was almost universally positive. Ratings: 6.6 (Fa04).

Computer Science 3s, 9[a-h], 47[abc] **Self-paced Programming Courses**

Team-taught with Mike Clancy (Sp05, Fa05). Authored new CS9a (Matlab) projects and revised several others. Designed (with TA Ka-Ping Yee and Mike Clancy) new CS9h Python course and revised CS9g (Java) course with new exams and projects. Designed & launched a novel pacing system to encourage students to complete their work on time. All student interaction is with paid undergraduate and graduate tutors; there are no faculty ratings. Taught Sp05-Sp13, aside from Fa07 [sabbatical]; course not rated.

Computer Science 61a Structure and Interpretation of Computer Programs

Team-taught with Brian Harvey (Sp01). Archived some chalkboard figures drawn during the semester to EPS graphic format for inclusion in a future reader. In Sp19, introduced Computing in the News, a regular element of CS10 at the start of every lecture. Introduced a "Clobber" grading policy that allowed students who did better on a later exam to have that score replace a poor score for an earlier exam. Ratings: 4.9 (Sp01), 5.7 (Sp02), 6.22 (Sp19)

Computer Science 61b Data Structures and Advanced Programming

Team-taught with Kathy Yelick (Fa03). Instituted "just in time learning", which involved several novel pedagogical concepts: peer instruction, reading quizzes and "ConcepTests" during lecture. Designed a new project (malloc simulation) and a new end-of-semester project (Domineering). Rating: 6.0 (Fa03)

Computer Science 61c Machine Structures

Team-taught with David Patterson (Fa01, Fa02), Michael Franklin (Fa11), Miki Lustig (Fa14, Fa19), and Bora Nikolić (Fa18, Fa20). Designed many new assignments and projects. Created parallelism week (lec+lab), and "just in time learning", which involved several novel pedagogical concepts: peer instruction, reading quizzes and lecture "ConcepTests". Added new projects in Fa14. In Fa20, put in significant effort (worked every single weekend, all weekend) to create archival MOOC-style lecture videos with accompanying lecture quizzes, and author 5 exams (quest, quest retake, midterm, midterm retake, final) in PrairieLearn using randomized question generators; these questions may be reused in later semesters. In response to the COVID pandemic, instituted many new student-centric policies: exams were untimed and open book with authentic C & MIPS coding questions, labs were *check-in* driven by student rather than *check-off*, we allowed students to work in partners on HW, we created hint videos to use Discord and to prepare for project, and we created a generous "no student will fail this course" incomplete policy, allowing struggling students to pause the class and continue the following semester. Also met with student representatives weekly to see if we were addressing all concerns. Co-instructor Prof. Nikolić and I split the workload evenly.

Ratings: 6.1 (Fa01), 6.3 (Fa02), 6.2 (Sp04), 5.9 (Fa04), 6.4 (Sp05), 6.4 (Fa05), 6.7 (Fa06), 6.3 (Sp07), 6.6 (Sp08), 6.5 (Sp10), 6.5 (Fa11), 6.5 (Sp13), 6.3 (Sp14), 6.2 (Fa14), 6.21 (Fa18), 6.09 (Fa19), 5.97 (Fa20)

Computer Science 195 Social Implications of Computing

Team-taught with Josh Hug (Sp17) and Josh and John DeNero (Sp18). Added lectures on software risks and algorithmic bias, education, and income inequality and the Bay Area. Ratings: 6.5 (Sp17), 6.6 (Sp18)

Computer Science 375 (was 301) Teaching Techniques for Computer Science

Team-taught with Brian Barsky (Sp03) and Chris Hunn (Sp20). In Sp01, gave course much-needed face-lift with Andy Begel. Created lecture notes, online roster, videotaping, cgi-bin programs for automatic, online journal entry for teaching reflection. Added faculty guest lectures. In Sp20, pivoted to an online learning model due to campus shutdown; surprisingly many of the class elements were better online! Achieved highest course ratings in CS375 history, we believe due to the way our transition was received. Ratings: 6.3 (Sp01), 6.5 (Sp02), 5.5 (Sp03), 5.9 (Sp08), 6.43 (Sp20)

Computer Science 302 **Designing Computer Science Education**

Team-taught with Michael Clancy and Babak Ayazifar (Sp12), and Pamela Fox (Sp21). Worked with small class to review their course design proposals (including sample exams, concept maps, grading policy proposals, etc). Facilitated weekly group discussion, and introduced "fishbowl" activity, where lecturers discuss how our own classes are going and the students get to see what the life of a teaching faculty is like. In Sp20, mandated that the course be taken by all CS summer instructors and merged 5 years of informal professional development materials with existing "clean room blue-sky course design" into curriculum. That is, sometimes students in the two cohorts worked on different assignments, targeted to each group. In Sp21, dedicated the course purely to support summer CS instructor professional development, bringing in speakers from campus (Center for Student Conduct, Disabled Students Program, and EECS Course Managers). Ratings: 6.6 (Sp10), 6.9 (Sp12), 6.3 (Sp14), 6.32 (Sp20), 5.94 (Sp21)

Computer Science 198 iOS Development DeCal (was "Macintosh Student Developers for OS X (MS-DOS X)")

Founded this novel course in Fa01. Course covers Macintosh OS X and iOS programming. Several alumni work for Apple. Taught Fa01-Sp05, DeCal-run Fa05-present. http://iosdecal.com/

Computer Science 198 UC Berkeley Undergraduate Graphics Group (UCBUGG)

Founded this novel course in Fa01. In eight semesters, supervised over 50 undergraduates through many graphics projects: generating and animating 2D & 3D fractals, building dynamic scene graphs using SLIDE, and using Maya and POV-ray animation software. Supervised design of "Berkeley-Stanford CS Day" logo. Directed several Maya CG animations. Invited many CG industry guests to give guest lectures and share their work and real-world experiences. Alumni work for Pixar, Dreamworks, Sony Pictures, LucasFilm, & Walt Disney Studios. Taught Fa01-Sp05, DeCal-run Fa05-present. http://ucbugg.com/

Computer Science 198 Undergraduate Game Theory Research (GamesCrafters)

Founded this novel group in Fa01. Since then, supervised over 500 undergraduates through many combinatorial & computational game theory projects. Most students coded game modules into the GAMESMAN software system that "solves" games for playing and analysis. Some advanced students implemented intuitive graphical interfaces, others added architectural enhancements to the primary bruteforce search engine, allowing for more efficient solving, analysis, and the ability to cache the game databases locally. Solved games whose value was not previously known, including famed "Three dot" by Edward DeBono who designed the game to be a draw, but is in fact a 1st-player win! Taught Fa01-present. http://gamescrafters.berkeley.edu/

Center for New Media 190 (cross-listed as Computer Science 194-8) Advanced Digital Animation

Founded this novel course in Fa06 with Art Practice Prof Greg Niemeyer and graduate student Jeremy Sequoia. Intended as a one-year course for advanced students who wish to work in visual effects, animation or entertainment industries. It guided them through the production process in an environment

similar to that of a production house. Welcomed guest lecturers from Pixar, PDI/Dreamworks, LucasFilm & Electronic Arts who shared their experiences with the class. Student teams of 10-12 produce a 30-second short film at the completion of the course. Ratings: 6.1 (Fa08), 4.8 (Sp09), 6.6 (Fa10), 6.2 (Sp11), 6.0 (Fa12), 6.2 (Sp13), 5.9 (Fa14), 6.1 (Sp15), 6.0 (Fa16), 5.6 (Sp17), 6.33 (Fa18), 5.94 (Sp19), 6.05 (Fa20), 5.90 (Sp21)

GRADUATE STUDENT INSTRUCTOR (GSI), UNIVERSITY OF CALIFORNIA, BERKELEY

Berkeley, CA

Computer Science CS3s, CS9[a-f] **Self-paced Programming Courses** (Fa92, Sp93, Sp94) Helped students one-on-one with programming assignments; administered quizzes.

Computer Science 39a Introduction to Computer Animation (Sp94, Sp95, Fa95, Fa96, Fa97)

Developed novel freshman seminar in Sp94 with Professor Brian A. Barsky. Gave lectures; created and graded assignments, final projects. Won departmental Outstanding GSI award in Fa97 (*last* sem. as a GSI).

Computer Science 184 **Foundations of Computer Graphics** (Fa92, Sp93, Fa93, Fa94, Sp96, Fa96, Fa97)

Taught lectures & discussion sections, wrote & graded assignments, projects and exams; created first course web page; designed scripts for automating web submissions. Won campus Outstanding GSI award in Fa92 (*first* semester as a GSI).

Computer Science 294 **Graduate Survey in Virtual Reality** (Sp97)

Provided technical support and graded final projects and presentations.

RESEARCH INTERESTS

Computer Science Education

- Investigate novel techniques and applications for improving CS instruction, especially introductory courses.
- Facilitate CSforALL efforts at state- and national-level. This involves state-level advocacy through CSforCA, and national-level efforts through innovative curriculum (AP CS Principles and our BJC course), Snap! software (http://snap.berkeley.edu), professional development for high school teachers (http://bjc.berkeley.edu), and supporting the hundreds of existing BJC teachers. (our Piazza forum)
- Intelligent tutors, mastery learning, online education tools, specifically for Beauty and Joy of Computing.
- Define/assess computational thinking. https://en.wikipedia.org/wiki/Computational thinking
- Create whimsical illustrations to teach CS concepts. http://csillustrated.berkeley.edu/

Computational Game theory

Automatically determine and summarize a two-person, perfect-information game's ideal strategy. Continue to build tools that make solving games efficient, playing enjoyable and analysis easy. Continue to use this framework for positive undergraduate software engineering experiences. Provide mobile applications and database servers, so people can always have the "answer" to a game from anywhere. Connect-4 (7x6 board) and Toot-n-Otto were recently solved, and Quarto, Connections, Bagh Chal, Mancala/Awari, and Dragons and Swans are next. http://gamescrafters.berkeley.edu/

Computer Animation

Remain current with the state of the art in computer animation, specifically tools and tricks for the computer animated short film pipeline. This feeds back to the *Advanced Digital Animation* course.

PROFESSIONAL AND PUBLIC SERVICE

- ACM SIGGRAPH student volunteer (1995-1998)
- ACM SIGCSE student volunteer (2000)
- ACM SIGCSE doctoral consortium discussant (2007)
- Judge for ACM Student Research Competition (2007)
- Outside reviewer for faculty promotion cases at several universities (2007, 2008)
- ACM SIGCSE student conference aide co-coordinator (2008)
- Reviewer for paper submitted to Journal Computer Science Education (2008)
- ACM SIGCSE New Teaching Faculty Roundtable (NTFR) co-coordinator (2009)
- Reviewer for paper submitted to Transaction on Computing Education (TOCE) (2010)
- Outside reviewer for UC San Diego's Computer Science and Engineering undergraduate program (2011)
- CollegeBoard Advanced Placement Computer Science: Principles initial pilot (2010-2011)
- CollegeBoard Advanced Placement Computer Science: Principles development Advisory Board (2009-2011)
- Graduate Record Exam (GRE) Computer Science Committee (2011-2012)
- Co-guest-editor for TOCE special Issue on Concurrent, Parallel and Distributed Computation (2011-2012)
- Reviewer for paper submitted to Learning, Media and Technology (2012)
- Outside reviewer for faculty promotion case at UC Santa Barbara (2013)
- Teaching Institute for Excellence in Stem (TIES) consultant for CS STEM initiative in Egypt (2013-2014)
- College Board Advanced Placement Computer Science: Principles teaching guide author (2013-2014)
- College Board Advanced Placement Computer Science: Principles pilot, phase II (2013-2015)
- Berkeley Foundation for Opportunities in Information Technology (BFOIT) faculty co-advisor (2007-2015)
- Technology Education And Literacy in Schools (TEALS) advisory board (2013-2015)
- SRI Principled Assessment of Computational Thinking (PACT) advisory board (2013-2015)
- Learning @ Scale Program Committee (2015)
- Blocks and Beyond (a VL/HCC workshop) Program Committee (2015)
- Participated in White House K-12 CS Education Workshop. White House, Washington, DC (2015)
- Participated in White House CS for ALL meeting. White House, Washington, DC (2016)
- Participated in NSF-funded working-group meeting to infuse Concurrency in CS Principles. Chicago, IL (2016)
- Create Task Table Leader at College Board AP CS Principles Mock Reading. Kansas City, MO (2016)
- SMASH CS Principles Instructors professional development and lead instructor coordinator (2015-2016).
- ACM Education Board (2007-2016)
- Participated in CSNYC Knowledge Forum Connecting CS Researchers and Practitioners. NY, NY (2016, 2017)
- Participated in CSforALL meeting of stakeholders, curriculum developers, and leaders. St. Louis, MO (2017)
- ACM Education Council, and technology and tools task force chair (2006-2017)
- Level Playing Field Institute's SMASH advisory board (2014-2017)
- Harvey Mudd's Computer Science Pedagogical Content Knowledge (CS PCK) advisory board (2014-2017)
- ACM SIGCSE 2017 Program co-Chair (2016-2017)
- ACM SIGCSE 2018 Symposium co-Chair (2017-2018)
- College Board Advanced Placement Computer Science: Principles development committee (2013-2018)
- CRA Committee on Best Practice for Teaching Faculty at Research Universities (2016-2018).
- Create Task Table Leader at College Board AP CS Principles Reading. Kansas City, MO (2017, 2018)
- TEALS Volunteer teaching the Beauty and Joy of Computing in San Mateo High School (2017-2018)
- College Board Computer Science: Principles Instructional Design and Testing committee (2018)
- SRI Computer Science in Secondary Schools (CS3) advisory board (2014-2018)
- NC State's ENGAGE project (computational thinking in middle school) advisory board (2016-2018)
- GamesCrafters: Computational Game Theory lecture. EECS Education Day HS outreach (2011-2019)
- ACM Richard Tapia Celebration of Diversity in Computing Conference Poster Judge (2018-2019)
- Snap!Con 2020 conference Organizing Committee co-Chair (2019-2020)
- Snap!shot 2020 conference Organizing Committee co-Chair (2020)
- Snap!Con 2021 conference Organizing Committee co-Chair (2020-2021)

- Participant, NSF Institute Planning Workshop on Parallel and Distributed Computing (PDC) Education (2020)
- Reviewer for paper submitted to CS Education Journal, special issue on Computational Thinking (2020)
- Led nomination of peer for ACM Award (2021)
- Voted SIGCSE Board Vice-Chair (2019-2022)
- Outside reviewer for 14 promotion (or ACM Senior Member) cases (2018-2021)
- Wrote recommendation letters for 76 undergraduate and graduate students (2018-2021)
- Wrote letters of support for 19 grants and initiatives (2018-2021)
- Outside reviewer for 14 promotion (or ACM Senior Member) cases (2018-2021)
- GamesCrafters Open House and Demo. Cal Day public outreach event (2004-present)
- Faculty champion for local CSTA: Golden Gate chapter (coordinate/lead monthly meetings) (2010-present)
- CMD-IT Academic Career Workshop Planning Committee (2014-present)
- The Beauty and Joy of Binary Numbers lecture. Cal Day public outreach event (2015-present)
- Faculty supporter for local CSTA: Silicon Valley chapter (attended monthly meetings) (2018-present)
- Faculty supporter for local CSTA: San Mateo County chapter (attended monthly meetings) (2018-present)
- NC State's InfuseCS advisory board (2020-present)

UC BERKELEY COMMITTEE SERVICE

- CS committee to add teaching as a CS outside minor Surveyed grads; presented results (1997)
- CS committee to revise lower-division to improve programming skills, install "clicker" devices (2003-2004)
- COE subcommittee to design & pilot new CS course (CS4) for COE common 1st year curriculum (2003-2005)
- COE computing and computer science education committee (2003-2007)
- COE CITRIS headquarters building cyber cafe and instructional audio/video needs committees (2004-2009)
- COE CITRIS headquarters building construction time-lapse movie archiving (2004-2009)
- EECS Computing, Networking & Instructional Labs committee (2005-2010)
- COE Taskforce on Diversity and Inclusion (2009-2010)
- EECS subcommittee to design & pilot CS10, new non-majors computing course (2009-2010)
- COE Ad-hoc committee to review retention case (2010)
- EECS Letters & Science steering committee (2010-2011)
- UC Berkeley Berkeley Resource Center for Online Education Grant Reviewer for MOOClab proposals (2013)
- UC Berkeley BioEngineering Lecturer SOE Search Committee (2013)
- UC Berkeley Computer Science Lecturer PSOE Search Committee (2013)
- EECS Task Force on Structural Changes in EECS Curriculum (2012-2014)
- Letters & Science computer science group advising sessions & summer CalSO seminars (2001-2014)
- UC Berkeley STEM Curriculum Working Group (2013-2014)
- UC Berkeley Faculty Advisory committee for Berkeley Resource Center for Online Education (2012-2015)
- UC Systemwide faculty working group on UC's lab science ("D") undergrad admissions requirement (2017)
- UC Berkeley Latino/a Assoc. of Grad Students in Eng. and Science (LAGSES) faculty advisor (2010-2018)
- EECS audio/video czar, serving as liaison from faculty to AV staff (2002-2018)
- EECS Education Day faculty coordinator, HS outreach for local Bay Area schools (2010-2019)
- COE Computing and Computer Science Education (2018-2021)
- EECS Undergraduate Advising (2003-present)
- CS Summer Sessions Faculty Coordinator (2011-present)
- EECS Undergraduate Study committee (2005-2007, 2011-present)
- COE committee to review Jr. transfer files for undergraduate admissions (2002, 2005, 2007, 2011-present)
- CS L&S Graduation Awards coordinator and presenter (2014-present)
- EECS Student Awards committee, Co-chair since 2016 (2012-2013, 2015-2016, 2016-present)

PROFESSIONAL SOCIETIES AND MEMBERSHIPS

- International Society for Optical Engineering, SPIE (1999)
- Eta Kappa Nu Electrical Engineering Honor Society (1990-2010).
- Faculty advisor for local Mu chapter, winner of IEEE-HKN Outstanding Chapter Award (2010-2014).
- Association of Computer Machinery (1988-present)
- Association of Computer Machinery Special Interest Group in Computer Science Education (2000-present)
- National Center for Women in Information Technology (NCWIT) Academic Alliance (2012-present)
- Computer Science Teachers Association (2010-present)
- CSforCA State-level Advocacy for CS Education Equity in California, Higher Ed Co-Chair (2019-present)

COMPUTER LANGUAGES & TOOLS

Snap!, BYOB, Python, C, Scheme & Common Lisp, Tcl/Tk, Java, csh, Unix, HTML, JavaScript, Perl, Matlab, Mathematica & Basic. Fluent in Adobe Development Suite (Photoshop, Illustrator, Premiere, After Effects). Mac power user for 30 years.

PUBLICITY / NEWS ARTICLES

- 1. Oh! The Beauty and Joy of Computing, Berkeley Engineering, 2009-12-15
- 2. Why Build Your Own Blocks?, Hélène Martin (blog), 2010-08-19
- 3. UC inaugurates pilot program for online classes, The Daily Californian, 2012-02-20
- 4. Campus increases use of social media, online platforms for discussion, The Daily Californian, 2012-03-19
- 5. UC Berkeley instructors develop new computer science course, The Daily Californian, 2012-09-09
- 6. A Reboot in Recruiting Women Into Computer Science, The Chronicle of Higher Education, 2012-10-29
- 7. Female students still struggle to find foothold in engineering, computer science, *The Daily Californian*, 2012-11-13
- 8. Compulsory Computing, The Daily Californian, 2012-11-14
- 9. One Professor's Approach to Online Learning: He's Learning Too, PBS NewsHour (with video), 2013-01-08
- 10. Professors see varying success in online courses, The Daily Californian (with video), 2013-02-27
- 11. UC Berkeley aims to stay ahead of the curve in age of tech, The Daily Californian, 2013-03-21
- 12. How to win at Connect Four every time! A link to a game solver that you can use on your smartphone or computer, *Mind Your Decisions* (blog), 2013-08-20
- 13. UC unveils 20 new online courses for high-demand classes, The Daily Californian, 2013-11-17
- 14. Online Education, Berkeley Science Review, 2013-11-20
- 15. Hundreds of teens attend Computer Science Education Day at Cal, Contra Costa Times, 2013-12-11
- 16. Tech shift: More women in computer science classes, San Francisco Chronicle (front page), 2014-02-18
- 17. For the First Time, Women Outnumber Men in a UC-Berkeley Computer Science Course, *slate* (remix of SF Chronicle article), 2014-02-21
- 18. Women Outnumber Men For The First Time In Berkeley's Intro To Computer Science Course, *TechCrunch*, 2014-02-21
- 19. Women Outnumber Men For The First Time In Berkeley's Intro To Computer Science, *Y combinator Hacker News* (remix of TechCrunch article), 2014-02-22
- 20. Women Outnumber Men in Berkeley's Intro to Computer Science, *bigthing* (remix of TechCrunch article), 2014-02-22
- 21. For the First Time Ever, More Women Than Men Enroll in UC Berkeley Intro to CS, women2.0 (remix of TechCrunch article), 2014-02-24
- 22. There Was a Major Step Forward for Women and Tech at Berkeley, *Identities.Mic* (remix of SF Chronicle article), 2014-02-24
- 23. Foodies using technology to get tough reservations, ABC 7 News (with video), 2014-02-25

- 24. Women in Tech: Ladies outnumber men in UC Berkeley computer class for the first time ever, *Bustle* (remix of SF Chronicle article), 2014-02-26
- 25. CS KickStart gives budding female computer scientists a window to the programming world, *San Jose Mercury News* (photo only), 2014-03-01
- 26. We need a moon shot to propel women into computer science careers, *San Jose Mercury News* (front page), 2014-03-01
- 27. One Small Tweak Made a World of Difference in This Computer Science Class, *NationSwell* (remix of SF Chronicle article), 2014-03-03
- 28. Programming for all?, Linking and thinking on education, 2014-03-07
- 29. The New Face of Tech...Is Wearing Mascara, *Verizon Wireless newscenter* (remix of SF Chronicle article), 2014-03-20
- 30. Innovations in Teaching: The Beauty and Joy of Computing, Phi Beta Kappa News, 2014-04-22
- 31. State senate passes bill to allow high school computer science classes to meet college admissions requirements, *The Daily Californian*, 2014-05-07
- 32. UC Berkeley Professor Drops Pre-Final Computer Science Rap, Huffington Post (with video), 2014-05-16
- 33. What better way to get ready for your final?, FOX KTVU Right This Minute (video), 2014-05-19
- 34. Computer science's diversity gap starts early, PBS NewsHour, 2014-05-28
- 35. Local professors work to make tech world more diverse, KTVU news (with video), 2014-05-29
- 36. As Silicon Valley Earns Image as a Boys' Club of "Tech Bros," Score One for Diversity, *Cal Alumni Association*, 2014-07-10
- 37. CS4HS at Kean University provides high school teachers with tools for success, *NJ Suburban News*, 2014-07-23
- 38. Harvey Mudd's Klawe Draws Blueprint for Closing Gender Gap: Tech, *Washington Post* (with Bloomberg), 2014-08-07
- 39. California Shores up Support for Computer Science Education, Center for Digital Education, 2014-08-27
- 40. Why top universities teach drag and drop programming, code.org, 2014-09-16
- 41. Campaign launched to promote value of computer science education, the Lane Report, 2014-10-01
- 42. EdX To Offer High School Level Courses, Harvard Crimson, 2014-10-01
- 43. Class Action: Gearing Up for the Hour of Code, NBC Bay Area (video), 2014-12-05
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- 45. Dan Garcia at TEDxBerkeley: The Beauty and Joy of Computing, TEDxBerkeley, 2015-02-26
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- 55. CS for All: Fundamentals for Our Future, *NYC Mayor's office* (video with BJC teachers and Curriculum featured), 2015-09-16
- 56. Snap! and BJC in the Scratch constellation, Scratch Amsterdam documentary (video), 2015-10-02
- 57. Adding 'Beauty And Joy' To Obama's Push For Computer Science Teaching, *NPR's All Things Considered* (audio), 2016-01-14
- 58. Kicking off Computer Science for All city will add AP classes, software programs, NY Chalkbeat, 2016-01-29
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- 64. Melinda Gates And Regina Dugan On How To Get More Women Into Tech (And Keep Them), *Fast Company*, 2016-11-04
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- 72. How Tech Companies Stake Out Hackathons for Future Stars, *Bloomberg's Decrypted podcast* (audio), 2017-04-03
- 73. Learning to Think Like a Computer, NY Times, 2017-04-04
- 74. Campus announces David Culler interim dean of new Division of Data Sciences, Daily Cal, 2017-05-31
- 75. EECS department releases new grading guidelines, Daily Cal, 2017-06-02
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- 78. AP Computer Science Draws In More Girls, Minorities, EdTech, 2017-08-17
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- 80. Engineers, Recruiters and Professors Weigh In: Future Programmers Need Writing Skills, Too, *EdSurge*, 2017-10-10
- 81. Female, minority students took AP computer science in record numbers, USA Today, 2018-08-27
- 82. 美国"全民计算机教育运动"领导人丹·葛西亚:通过快乐编程来普及计算机教育(translation: American "National Computer Education Movement" leader Dan Garcia: through happy programming to popularize computer education) *Central Radio and TV Station International Online (CHINA)*, 2018-10-24
- 83. The Discipline That Is Transforming Higher Ed, The Chronicle of Higher Education, 2020-04-15
- 84. Professor Dan Garcia on Holding Students' Attention to Stay on Track in Asynchronous Instruction, *Medium*, 2020-06-22
- 85. Cal Professor's Creative Video Lessons Keep Students Engaged, NBC Bay Area (video), 2020-09-05
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PUBLICATIONS AND PRESENTATIONS

Theses

- 1. Daniel D Garcia. Serial-Parallel Software Simulation, *B.S. Thesis*; Massachusetts Institute of Technology, May, 1990.
- 2. Daniel D. Garcia. GAMESMAN: A finite, two-person, perfect-information game generator, *M.S. Thesis*; University of California, Berkeley, May, 1995.
- 3. Daniel D. Garcia. CWhatUC: Software Tools for Predicting, Visualizing and Simulating Corneal Visual Acuity, *Ph.D. Thesis*; University of California, Berkeley, May, 2000.

Theses Supervised

- 1. Bryce Lee. Interface Design and Implementation of a Collaborative Observatory for Natural Environments. *MS Project* (2nd reader), EECS Dept, UC Berkeley, May, 2008.
- 2. Jeremy Huddleston. Advanced Digital Animation Curriculum Development: An Interdisciplinary Approach, *MS Thesis*, EECS Dept, UC Berkeley, May, 2009.
- 3. Ketrina Yim. Computer Science Illustrated, MS Project, EECS Dept, UC Berkeley, May, 2009.
- 4. Albert Luke Segars. REGIS: Random Exercise Generation and Inference System, *MS Project*, EECS Dept, UC Berkeley, May, 2012.
- 5. Dan Armendariz. OCTAL: The Online Course Tool for Adaptive Learning, *MS Project*, EECS Dept, UC Berkeley, May, 2014.
- 6. Stephanie Rogers. ACES: Automatic Evaluation of Coding Style, *MS Project* (2nd reader), EECS Dept, UC Berkeley, May, 2014.
- 7. Omoju Miller. HipHopathy, A Socio-Curricular Study of Introductory Computer Science, *PhD Thesis* (2nd reader), EECS Dept, UC Berkeley, December, 2015.
- 8. Jonathan McKinsey. Remote Pair Programming in a Visual Programming Language, *MS Project*, EECS Dept, UC Berkeley, May, 2015.
- 9. Zachary MacHardy. Applications of Bayesian Knowledge Tracing to the Curation of Educational Videos, *MS Project*, EECS Dept, UC Berkeley, May, 2015.
- 10. Michael Ball. λ -- An Autograder for Snap!, MS Project, EECS Dept, UC Berkeley, May, 2016.
- 11. Yifat Amir. A Data Analysis of Student Success and Motivations in the BJCx MOOC, *MS Project*, EECS Dept, UC Berkeley, May, 2018.
- 12. Zhiping "Patricia" Xiao. AutoQuiz: an online, adaptive, test practice system, *MS Project*, EECS Dept, UC Berkeley, May, 2018.
- 13. Steven Hewitt. Teaching with Reinforcement Learning: A Smarter AutoQuiz, *MS Project*, EECS Dept, UC Berkeley, May, 2019.
- 14. Lara McConnaughey. An Analysis of Introductory Courses Affect on Student Sentiment and Stereotype Toward Computer Science, *MS Project*, EECS Dept, UC Berkeley, May, 2019.
- 15. Mansi Shah. Exploring the Use of Parsons Problems for Learning a New Programming Language, *MS Project*, EECS Dept, UC Berkeley, May, 2020.
- 16. Qitian Liao. Automatic Detection of Interesting Cellular Automata, *MS Project*, EECS Dept, UC Berkeley, May, 2021.
- 17. Anthony Ling. GamesmanPuzzles: A Leap Into the Puzzles Domain, *MS Project*, EECS Dept, UC Berkeley, May, 2021.
- 18. Bojin "Max" Yao. Computer-Based Testing using PrairieLearn in BJC, MS Project, EECS Dept, UC Berkeley, May, 2021.

Book Chapters

- 1. Daniel D. Garcia. Xdom: A Graphical, X-based Front-End for Domineering, *Games of No Chance*, Richard J. Nowakowski, editor. Cambridge University Press, 1996, pp. 311-313.
- 2. **Dan Garcia** and Joshua Paley. Repetition and Recursion, *Computer Science in K-12: An A-to-Z handbook on teaching programming*, Shuchi Grover, editor. Edfinity, 2020, pp. 189-203.

Refereed Archival Journal Articles

- Brian A. Barsky, Stanley A. Klein, and Daniel D. Garcia. Gaussian Power with Cylinder Vector Field Representation for Corneal Topography Maps, *Optometry and Vision Science*, Vol. 74, No. 11, Nov, 1997.
- 2. Stanley A. Klein and Daniel D. Garcia. Line of Sight and Alternative Representations of Aberrations of the Eye, *Journal of Refractive Surgery*, Vol. 16, Sep/Oct 2000.
- 3. David Ginat and Daniel D. Garcia. Ordering Patterns and List Inversions, *Journal of CS Education*, Nov 2003.

- 4. Orpheus S. L. Crutchfield, Christopher D. Harrison, Daniel D. Garcia, Sheila M. Humpreys, Colleen M. Lewis, and Peter Khooshabeh. 2011. Berkeley Foundation for Opportunities in Information Technology: A Decade of Broadening Participation. *Trans. Comput. Educ.* 11, 3, Article 15 (October 2011), 24 pages.
- 5. Lawrence Snyder, Tiffany Barnes, Dan Garcia, Jody Paul, and Beth Simon. 2012. The first five computer science principles pilots: summary and comparisons. *ACM Inroads* 3, 2 (June 2012), 54-57.
- 6. Julia Bernd, Blanca Gordo, Jaeyoung Choi, Bryan Morgan, Nicholas Henderson, Serge Egelman, Daniel D. Garcia, and Gerald Friedland. Teaching Privacy: Multimedia Making a Difference, *IEEE MultiMedia*, vol. 22, no. 1, pp. 12-19, 2015. doi:10.1109/MMUL.2015.16
- 7. Daniel D. Garcia. 2015. TECH launch with gradescope: exam grading will never be the same again!. *ACM Inroads* 6, 2 (May 2015), 82-83. DOI: https://doi.org/10.1145/2747883
- 8. Dan Garcia, Brian Harvey, and Tiffany Barnes. 2015. The beauty and joy of computing. *ACM Inroads* 6, 4 (November 2015), 71-79. DOI: https://doi.org/10.1145/2835184

Refereed Conference Proceedings (Papers)

- 1. Daniel D. Garcia. One size fits all?! One size fits none! (white paper), *Integrative Computing Education & Research (ICER) West NSF Workshop*, Palo Alto, CA, January 27-28, 2006.
- Yanpei Chen, Patricia C. Fong, Jerry Hong, Deepa Mahajan, Cynthia Okita, David Eitan Poll, Alan Roytman,
 Ofer Sadgat, and Daniel D. Garcia. 200 Students Can't Be Wrong! GamesCrafters, a Computational Game
 Theory Undergraduate Research and Development Group at UC Berkeley (Paper). AAAI Spring Symposium
 2008: "Using AI to motivate greater participation in Computer Science", Stanford, CA, March 26-28, 2008.
- 3. Ketrina Yim, Sally Ahn, and Daniel D. Garcia. Computer Science Illustrated: Engaging Visual Aids for Computer Science Education (Paper) *SIGCSE 2010*, Milwaukee, WI, March 10-13, 2010.
- 4. Daniel D. Garcia, Gene Zhang, Sean Carr, Sameer Iyengar, Hava Edelstein, and Albert Liu. The Weiner Lecture Archives: An Ontology-Driven Interface for Viewing Synchronized Lectures and Notes (Paper) *SIGCSE 2010*, Milwaukee, WI, March 10-13, 2010.
- Ed Fox, Yinlin Chen, Monika Akbar, Clifford Shaffer, Stephen Edwards, Peter Brusilovsky, Daniel D. Garcia, Lois Delcambre, Fran Decker, David Archer, Richard Furuta, Frank Shipman, Stephen Carpenter, and Lillian Cassel. Ensemble PDP-8: Eight Principles for Distributed Portals (Paper), JCDL 2010, Surfer's Paradise, Australia, June 21-25, 2010.
- 6. Daniel D. Garcia, Colleen Lewis, Brian Harvey, George Wang, Stephanie Chou, and Jens Moenig. Scratch at the College Level: The Beauty and Joy of Computing (Paper), Scratch@MIT, Cambridge, MA, August 12-14, 2010
- 7. Peter Brusilovsky, Lilian Cassel, Lois Delcambre, Edward Fox, Richard Furuta, Dan Garcia, Frank Shipman, Michael Yudelson, and Paul Bogen. Enhancing Digital Libraries with Social Navigation: The Case of Ensemble (Paper), European Conference on Digital Libraries (ECDL 2010), Glasgow, Poland, September 6-10, 2010.
- 8. Monika Akbar, Weiguo Fan, Clifford A. Shaffer, Yinlin Chen, Lillian Cassel, Lois Delcambre, Daniel D. Garcia, Gregory W. Hislop, Frank Shipman, Richard Furuta, B. Stephen Carpenter II, Haowei Hsieh, Bob Siegfried, and Edward A. Fox. Digital Library 2.0 for Educational Resources (Paper), *International Conference on Theory and Practice of Digital Libraries 2011 (TPDL 2010)*, Berlin, GERMANY, September 25-29, 2011.
- 9. Thomas W. Price, Veronica Cateté, Jennifer Albert, Tiffany Barnes, and Daniel D. Garcia. 2016. Lessons Learned from "BJC" CS Principles Professional Development. In *Proceedings of the 47th ACM Technical Symposium on Computing Science Education (SIGCSE '16)*. ACM, New York, NY, USA, 467-472. DOI: https://doi.org/10.1145/2839509.2844625
- 10. Serge Egelman, Julia Bernd, Gerald Friedland, and Dan Garcia. 2016. The Teaching Privacy Curriculum. In *Proceedings of the 47th ACM Technical Symposium on Computing Science Education (SIGCSE '16)*. ACM, New York, NY, USA, 591-596. DOI: https://doi.org/10.1145/2839509.2844619
- 11. Ryan Lund, Connor McMahon, **Dan Garcia**, and Borivoje Nikolić. Improved Processor Design Project Testing, *Workshop on Computer Architecture Education (WCEA) 2021*, Online, 2021-06-17.

Technical Reports

- 1. Daniel D. Garcia. SPAM: Spline-parameterized adjustable motion, In Procedural Modeling, *UC Berkeley EECS Technical Report CSD-94-860*, December 1994.
- 2. Gene Zhang, Sean Carr, Sameer Iyengar, Hava Edelstein, Albert Liu, and Daniel D. Garcia. The Weiner Lecture Archives: An Ontology-Driven Interface for Viewing Synchronized Lectures and Notes, *UC Berkeley EECS Technical Report UCB/EECS-2007-135*, November 2007.
- 3. Matthew Johnson, Robert H. Liao, Alexander Rasmussen, Ramesh Sridharan, Daniel D. Garcia, and Brian Harvey. Infusing Parallelism into Introductory Computer Science Curriculum using MapReduce, *UC Berkeley EECS Technical Report UCB/EECS-2008-34*, April 2008.
- 4. Tiffany Barnes and Dan Garcia. 2018. SIGCSE symposium 2018 report. SIGCSE Bull. 50, 2 (April 2018), 2-3. DOI: https://doi.org/10.1145/3212402.3212403

Invited Talks

- Employing Web Technology in Classes at Berkeley Multimedia Research Center retreat (1997)
- Technology in Education at "Teaching Psychology in the 21st Century" workshop (1997)
- How to be an Outstanding Graduate Student Instructor for CS301 (CS GSI Teaching Techniques) course (1993-1998)
- Computer Science Workshop for GSI orientation and teaching conference (1999)
- The History of Computer Graphics fireside chat at Foothill residence hall (2002)
- Keynote for Computer Science Business Association's "Introduction to CS" session (2002)
- Keynote for Berkeley's Coalition for Diversity engineering session (2003)
- Keynote for Center for Undergraduate Matters prospective minority engineering recruiting (2002, 2005)
- An Introduction to Combinatorial Game Theory for Eta Kappa Nu honor society general mtg (2002, 2005)
- Faculty Address at College of Letters & Science Computer Science commencement (2004)
- Graphics, Game Theory and Genealogy at Sandia National Labs (2004, 2006)
- Peer Instruction w/Clickers in CS61C at Cal "Teaching, Learning and Technology" Symposium (2007)
- DART Opportunities for CS Students at Cal "Teaching, Learning and Technology" Symposium (2007)
- Computer Science keynote for College Board AP annual conference (2007)
- Teaching Tips, Best Practices and Other Initiatives to Improve CS Education at University of Melbourne, La Trobe University, RMIT University, & Fourth Melbourne Computing Education Conventicle Keynote (2007)
- 200 Students Can't Be Wrong! GamesCrafters, a Computational Game Theory Group at University of Melbourne (2007)
- Hashing guest lecture in CS70: Discrete Mathematics for Computer Science (2008)
- Infusing Concurrency into the Intro CS Undergraduate Curricula at the Intel Developer Forum (2008)
- What is Digital Media lecture in Berkeley Art Museum/Pacific Film Archives Digital Cultures 0101 (2008)
- Teach Parallel: Professor Dan Garcia (video podcast), Intel Software Network TV (2009)
- Computer Science Unplugged, CS Education Leadership Summit, Mountain View, CA (2009)
- Keeping the Millennials Engaged with Active Learning, or Clickers in Instruction, Grinnell College (2010)
- GamesCrafters, a Computational Game Theory Group, Grinnell College (2010)
- GamesCrafters, a Computational Game Theory Group, Gunn High School (2010)
- GamesCrafters, a Computational Game Theory Group, Ralph Bunche High School (2010)
- GamesCrafters, a Computational Game Theory Group, Albany High School (2010)
- Infusing Concurrency into Intro CS Undergraduate Curricula, University of Puerto Rico, Rio Piedras (2010)
- GamesCrafters, a Computational Game Theory Group, University of Puerto Rico, Rio Piedras (2010)
- Keynote for Berkeley Foundation for Opportunities in Information Technology (BFOIT) (2001-2002, 2006, 2011)
- Best Practices and Teaching Tips to Improve CS Education, Distinguished CS Educator Lecture, U Illinois Chicago (2011)
- The Beauty and Joy of Computing UC Online Instruction Pilot Project, UCB Online Consortium (2011)

- Twenty Top Time-Tested TA Teaching Tips at UCB Teaching Conference for International GSIs (2008, 2012)
- An Update on the High School Computing Landscape, Rutgers University (2010, 2012)
- The computer science GRE and graduate school, UC Berkeley HKN General Meeting (2012)
- Transforming K-12 Computer Science: The Beauty and Joy of Computing, CITRIS Research Exchange (2012)
- The Beauty and Joy of Computing (BJC), AP CS Principles, and the CS 10k effort, CISE Distinguished Lecture Series (2012)
- Transforming K-12 Computer Science: The Beauty and Joy of Computing, Athens College (2013)
- Transforming K-12 Computer Science: The Beauty and Joy of Computing, National Technical University of Athens (2013)
- Keynote for Computer Science Kickstart (2013)
- *Demystifying Computing w/Magic*, Peking University (2013).
- Computational Game Theory, Peking University (2013).
- Transforming K-12 Computer Science: The Beauty and Joy of Computing, Berkeley Institute of Design (2013)
- Moving the Needle, EECS Industrial Advisory Board (2013)
- Engaging Underrepresented Students, Google Engage CSEd Summit (2014)
- Keynote: Transforming K-12 Computer Science: The Beauty and Joy of Computing, Tapia Conference (2014)
- Transforming K-12 Computer Science: The Beauty and Joy of Computing, UCSF CS Colloquium (2014)
- Beauty and Joy of Computing and Snap!, CSP4HS Hangout on the Air hosted by Jeff Gray (2014)
- CS & GamesCrafters guest lecture in E92: Perspectives in Engineering (2008, 2010, 2011, 2012, 2014)
- Keynote: Always remember to LAUGH, IEEE-HKN Student Leadership Conference @ UC Berkeley (2015)
- The Beauty and Joy of Computing. Berkeley Forum (2015).
- The Beauty and Joy of Computing. SMASH Summer Instructor Professional Development Series (2015)
- How we use Piazza and the must-have features going forward. Piazza, Inc. (2015)
- CS, GamesCrafters & the Beauty and Joy of Computing. SMASH Berkeley Summer Institute. (2015)
- The Beauty and Joy of Computing and BJC4NYC. TwoSigma, Inc. (2015)
- CS & GamesCrafters guest lecture in L&S 1: Exploring the Liberal Arts (2015)
- The Beauty and Joy of Binary Numbers. Visiting Middle School Students, UC Berkeley (2015).
- Transforming K-12 CS: The Beauty and Joy of Computing. University of British Columbia (2015).
- The K-12 Computer Science Education Landscape, InfoSys Award Ceremony (2016)
- Closing Keynote, "Girls Can Code" camp, Polytechnic University of Puerto Rico (2016)
- How to Get Into Grad School and Thrive Once There, Peking University (2016)
- Transforming K-12 Computer Science: The Beauty and Joy of Computing, Philadelphia CS4HS (2016)
- Transforming K-12 Computer Science: The Beauty and Joy of Computing, ACM Ed Council Mtg (2016)
- Transforming K-12 Computer Science: The Beauty and Joy of Computing, CITRIS Research Exchange (2016)
- Transforming K-12 Computer Science: The Beauty and Joy of Computing, vmware (2017)
- The Beauty and Joy of Binary Numbers, UC Berkeley First Lecture series (2017)
- Transforming K-12 Computer Science: The Beauty and Joy of Computing, Alabama CS Summit (2017)
- Transforming K-12 Computer Science: The Beauty and Joy of Computing, STEM series, Contra Costa Community College (2018)
- Achieving CSforALL through The Beauty and Joy of Computing (BJC), Shanghai University (2018)
- Achieving CSforALL through The Beauty and Joy of Computing (BJC), Hangzhou University (2018)
- Achieving CSforALL through The Beauty and Joy of Computing (BJC), Zhejiang University City College (2018)
- Transforming K-12 Computer Science: The Beauty and Joy of Computing, UCB Lair of the Bear (2016-2019)
- Love Teaching? Consider a Teaching-Track Career!, UC Berkeley Summer 2020 CS375 Guest Lecture (2020)
- The Beauty and Joy of Binary Numbers, CSTA San Mateo County Chapter Guest Lecture, Online (2020)
- GamesCrafters, ACM Distinguished Speaker talk, SF State ACM Chapter, Virtual Lecture (2020)
- The Beauty and Joy of Computing, UTK BJC Perú Graduation Ceremony, Online (2020)
- GamesCrafters, ACM Distinguished Speaker talk, Duke University ACM Chapter, Virtual Lecture (2021)
- GamesCrafters, ACM Distinguished Speaker talk, RAIT ACM Chapter, Virtual Lecture (2021)
- The Beauty and Joy of Computing, UTK BJC Perú Graduation Ceremony, Online (2021)

- The Beauty and Joy of Computing, NSF CISE Education and Workforce PI and Community vMeeting (2021)
- Follow your passion: Graphics, Game theory, and Genealogy, ACM Distinguished Speaker talk, CSU
 Monterey Bay Women in Computer Science, Virtual Lecture (2021)

Conference and Workshop Presentations

- Barsky, Brian A.; Klein, Stanley A.; and Garcia, Daniel D. Gaussian Power, Mean Sphere, and Cylinder Representations for Corneal Maps with Applications to the Diagnosis of Keratoconus, Association for Research in Vision and Ophthalmology, Fort Lauderdale, FL, April 21-26, 1996. Abstract in *Investigative* Ophthalmology & Visual Science, Vol.37, No. 3, February 15, 1996, pp. 5558.
- 2. Kumpf, Roger W.; Barsky, Brian A.; and Garcia, Daniel D. Scientific Visualization Techniques for Displaying Corneal Shape, Mopane 1996: *Refraction and Keratometry: The Mathematics and Statistics*, Mopane, S Africa, August 3-5, 1996.
- 3. Garcia, Daniel D. and Barsky, Brian A. The OPTICAL Project at UC Berkeley: Computer Aided Cornea Modeling and Visualization (video in the Electronic Theatre), *SIGGRAPH* '96, New Orleans, LA, August 4-9, 1996.
- 4. van de Pol, Corina; Klein, Stanley A.; Garcia, Daniel D.; and Barsky, Brian. New Representations of Corneal Refractive Error and Aberrations, *Optical Society of America*, Long Beach, CA, October 1997.
- 5. Garcia, Daniel D. and Barsky, Brian A. Corneal Astigmatism and Fluorescein Patterns: The OPTICAL Project at UC Berkeley, video which won first prize for scientific visualization at the 1997 SIGGRAPH Amateur and Student Computer Animation / Design Contest, San Francisco, CA, October 21, 1997.
- 6. Garcia, Daniel D.; Barsky, Brian A.; and Klein, Stanley A. CWhatUC: A Visual Acuity Simulator, *Proceedings of SPIE* / IS&T Symposium on Electronic Imaging: Science and Technology, San Jose, CA, January 24-30, 1998.
- 7. Garcia, Daniel D.; Barsky, Brian A.; and Klein, Stanley A. The OPTICAL Project at UC Berkeley: Simulating Visual Acuity, *Medicine Meets Virtual Reality: 6 (Art, Science, Technology: Healthcare (r)Evolution)*, San Diego, CA, Jan 28-31, 1998.
- 8. van de Pol, Corina; Tran, Henry H.; Garcia, Daniel D.; and Klein, Stanley A. Three-Dimensional Analysis of Corneal Image Forming Properties: A Monocular Diplopia Example, presented at *Vision Science and Its Applications* Meeting, Santa Fe, NM, February 6-9, 1998.
- 9. Garcia, Daniel D.; Barsky, Brian A.; and Klein, Stanley A. Wavefront Coherence Area for Predicting Visual Acuity of Post-PRK and Post-PARK Refractive Surgery Patients, *Proceedings of SPIE/IS&T* Symposium on Electronic Imaging: Science and Technology, San Jose, CA, January 23-29, 1999.
- 10. Barsky, Brian, A.; Chen, Billy P.; Berg, Alexander C.; Moutet, Maxence; Garcia, Daniel D.; Klein, Stanley A. Incorporating Camera Models, Ocular Models, and Actual Patient Eye Data for Photo-Realistic and Vision-Realistic Rendering, Abstract in the 5th International Conference on Mathematical Methods for Curves and Surfaces, Oslo, NORWAY, June 29-July 4, 2000.
- 11. Ginat, David; Garcia, Daniel D.; Bergin, Joseph; Astrachan, Owen. Colorful Illustrations of Algorithmic Design Techniques and Problem Solving (Special Session), *SIGCSE 2001*, Charlotte, NC, February 23, 2001.
- 12. Ginat, David; and Garcia, Daniel D.; Mathematical Games as an Aid for CS Instruction (Birds of a Feather), *SIGCSE 2001*, Charlotte, NC, February 23, 2001.
- 13. Klein, Stanley A.; Barsky, Brian A.; and Garcia, Daniel D. Computer Simulation of Vision-Based Synthetic Images using Hartmann-Shack-Derived Wavefront Aberrations, *Association for Research in Vision and Ophthalmology 2001 conference*, Fort Lauderdale, FL, May 3, 2001
- 14. Garcia, Daniel D.; Ginat, David; Gasarch, William I. Aha! An Illuminating Perspective (Special Session), *SIGCSE 2002*, Northern Kentucky, KY, February 28, 2002.
- 15. Garcia, Daniel D.; Levine, David B.; Estell, John K.; Reed, David; Zelinski, Julie. Nifty Assignments (Special Session), *SIGCSE 2002*, Northern Kentucky, KY, March 2, 2002.
- 16. Barsky, Brian A.; Bargteil, Adam W.; Garcia, Daniel D.; and Klein, Stanley A., Introducing Vision-Realistic Rendering, *Eurographics Rendering Workshop*, Pisa, June 26-28, 2002.
- 17. Garcia, Daniel D.; Ginat, David; and Henderson, Peter. Everything You Always Wanted To Know About Game Theory* (*but were afraid to ask) (Special Session), *SIGCSE 2003*, Reno, NV, February 20, 2003.

- 18. Begel, Andrew; Garcia, Daniel D.; and Wolfman, Steven A. Kinesthetic Learning in the Classroom (Special Session), *SIGCSE 2004*, Norfolk, VA, March 5, 2004.
- 19. Dougherty, John P.; Garcia, Daniel D.; Horton, Thomas B.; Rodger, and Susan H. Teaching Faculty Positions (Panel), *SIGCSE 2004*, Norfolk, VA, March 5, 2004.
- 20. Ginat, David; Astrachan, Owen; Garcia, Daniel D.; and Guzdial, Mark. "But it looks right!": The Bugs Students Don't See (Special Session), *SIGCSE 2004*, Norfolk, VA, March 5, 2004.
- 21. Begel, Andrew; Garcia, Daniel D.; and Wolfman, Steven A. Kinesthetic Learning in the Classroom (Workshop), *SIGCSE 2005*, St. Louis, MO, February 23-27, 2005.
- 22. Ginat, David; Anderson, Richard; Garcia, Daniel D.; and Rasala, Richard. Randomness and Probability in the Early CS Courses (Special Session), *SIGCSE 2005*, St. Louis, MO, February 23-27, 2005.
- 23. Cortina, Thomas J; Garcia, Daniel D.; and Slater, Don. Teaching Track Faculty in CS (BoF), *SIGCSE 2006*, Houston, TX, March 1-4, 2006.
- 24. Garcia, Daniel D.; Astrachan, Owen; Parlante, Nick; and Reges, Stuart. Teaching Tips We Wish They'd Told Us Before We Started (Panel), *SIGCSE 2007*, Covington, KY, March 7-10, 2007.
- 25. Forbes, Jeffrey; and Garcia, Daniel D. "...But What Do the Top-Rated Schools Do?" A Survey of Introductory Computer Science Curricula (Special Session), SIGCSE 2007, Covington, KY, March 7-10, 2007.
- Slater, Don and Garcia, Daniel D. Teaching Track Faculty in CS (BoF), SIGCSE 2007, Covington, KY, March 7-10, 2007.
- 27. McGettrick, Andrew; Garcia, Daniel D.; Roberts, Eric; and Stephenson, Chris. Rediscovering the Passion, Beauty, Joy and Awe: Making Computing Fun Again (Special Session), *SIGCSE 2008*, Portland, OR, March 12-15, 2008.
- 28. Boustedt, Jonas; Tenenberg, Josh; Eastman, Caroline M.; Gestwicki, Paul; McCartney, Robert; Anderson, Scott D.; Garcia, Daniel D.; and Menzin, Margaret. It Seemed Like a Good Idea at the Time (Special Session), *SIGCSE 2008*, Portland, OR, March 12-15, 2008.
- 29. Slater, Don; and Garcia, Daniel D. Teaching Track Faculty in CS (BoF), *SIGCSE 2008*, Portland, OR, March 12-15, 2008.
- 30. Garcia, Daniel D., Ishida, Valerie and Johnson, Maggie. Technology and Tools for Computing Educators (Birds of a Feather), *SIGCSE 2008*, Portland, OR, March 12-15, 2008.
- 31. Johnson, Matthew; Liao, Robert H.; Rasmussen, Alexander; Sridharan, Ramesh; Garcia, Daniel D. and Harvey, Brian. Infusing Parallelism into Introductory CS using MapReduce (Poster), *SIGCSE 2008*, Portland, OR, March 12-15, 2008.
- 32. Yim, Ketrina; Garcia, Daniel D. and Ahn, Sally. CS Illustrated (Poster), *SIGCSE 2009*, Chattanooga, TN, March 4-7, 2009.
- 33. Brusilovsky, Peter; Carpenter, Steve; Cassel, Lillian; Delcambre, Lois; Edwards, Steve; Fan, Patrick; Fox, Edward; Furuta, Richard; Garcia, Dan; Hislop, Greg; Johnson, Maggie; Maier, David; Perez-Quinones, Manuel; Seidman, Steve; Shipman, Frank; Stephenson, Chris; Topi, Heikki and York, Bryant; Ensemble: Creating a National Digital Library for Computing Education (Poster), *SIGCSE 2009*, Chattanooga, TN, March 4-7, 2009.
- 34. Garcia, Daniel D.; Cutler, Robb; Dodds, Zachary; Roberts, Eric; and Young, Alison. Rediscovering the Passion, Beauty, Joy and Awe: Making Computing Fun Again, continued (Special Session), *SIGCSE 2009*, Chattanooga, TN, March 4-7, 2009.
- 35. Garcia, Daniel D. and Zelenski, Julie. New Teaching Faculty Roundtable (NTFR) (Workshop), *SIGCSE 2009*, Chattanooga, TN, March 4-7, 2009.
- 36. Slater, Don; and Garcia, Daniel D. Teaching Track Faculty in CS (BoF), *SIGCSE 2009*, Chattanooga, TN, March 4-7, 2009.
- 37. Garcia, Daniel D.; Bailes, Don and Fincher, Sally. Technology that Educators of Computing Hail (TECH) (Birds of a Feather), *SIGCSE 2009*, Chattanooga, TN, March 4-7, 2009.
- 38. Fox, Ed; Brusilovsky, Peter; Hislop, Greg; Garcia, Daniel D.; Delcambre, Lois; Furuta, Richard; Shipman, Frank; Akbar, Monika; Carpenter, Steve; and Cassel, Lillian. Supporting Social Interaction in the Ensemble Pathway (Special Session), *NSDL Annual Meeting 2009*, Washington, DC, November 18, 2009.
- 39. Garcia, Daniel D.; Chapman, Gail; Hazzan, Orit; Johnson, Maggie; and Sudol, Leigh Ann. Rediscovering the Passion, Beauty, Joy and Awe: Making Computing Fun Again, part 3 (Panel) *SIGCSE 2010*, Milwaukee, WI, March 10-13, 2010.

- 40. Garcia, Daniel D.; Dougherty, John P.; Jadud, Matthew C.; and Lewis, Colleen M. If ______, You Might Be a Computational Thinker! (Special Session) *SIGCSE 2010*, Milwaukee, WI, March 10-13, 2010.
- 41. Garcia, Daniel D.; Bailes, Don and Fincher, Sally. Technology that Educators of Computing Hail (TECH) (Birds of a Feather), *SIGCSE 2010*, Milwaukee, WI, March 10-13, 2010.
- 42. Cassel, Lillian; Siegfried, Robert; Potluri, Sridhara; and Garcia, Daniel D. Using Drupal for Educational Web Site Development (Workshop), *SIGCSE 2010*, Milwaukee, WI, March 10-13, 2010.
- 43. Akbar, Monika; Fox, Edward A.; Cassel, Lillian N.; Chen, Yinlin; Edwards, Stephen; Brusilovsky, Peter L.; Carpenter, Stephen; Delcambre, Lois; Fan, Weiguo; Furuta, Richard; Shipman, Frank M.; Garcia, Daniel D.; Hislop, Greg; Maier, David; Perez-Quinones, Manuel; Stephenson, Christine; York, Bryant; and Hsieh, Haowei. ENSEMBLE: Supporting the Full Range of Computing Education Communities (Poster), *SIGCSE* 2010, Milwaukee, WI, March 10-13, 2010.
- 44. Garcia, Daniel D., two others. Preparing Future Faculty: How to Teach a Large Course (Panel) *GSI Teaching and Resource Center Spring 2010 Teaching Workshops*, Berkeley, CA, April 1, 2010.
- 45. Garcia, Daniel D.; Snyder, Larry; McGettrick, Andrew; and Alshemmari, Sami. Computing Careers: The Magic and Beauty of Computing (Panel) *ACM Ed. Board & Qatar University Communicating Ideas Workshop*, Doha, QATAR, May 3, 2010.
- 46. Cassel, Lillian.; Fox, Ed; Shipman, Frank; Brusilovsky, Peter; Fax, Weiguo; Garcia, Dan; Hislop, Greg; Furuta, Richard; Delcambre, Lois; and Potluri, Sridhara. Ensemble: enriching communities and collections to support education in computing (Poster) *J. Comput. Small Coll.* 25, 6 (Jun. 2010), 224-226.
- 47. Garcia, Daniel D.; Hutton, Michele; Lemon, Eugene; Paley, Josh; and Patterson, David. The future of computing education: what are the needs, and what can ACM do? (Panel) *ACM Ed Council Meeting*, Berkeley, CA, June 21, 2010.
- 48. Garcia, Daniel D.; Lewis, Colleen M. and Lemon, Eugene. A Summer Workshop for middle- and high-school computing teachers (Workshop), *CS4HS @ Cal 2010*, Berkeley, CA, June 28-29, 2010.
- 49. Garcia, Daniel D. Computer Science Unplugged (Workshop), CS4HS @ UCLA, Los Angeles, CA, July 22, 2010.
- 50. Garcia, Daniel D. 274 Students Can't Be Wrong: GamesCrafters, a Computational Game Theory Undergraduate Research and Development Group at UC Berkeley (Workshop), *CS4HS @ UCLA*, Los Angeles, CA, July 22, 2010.
- 51. Garcia, Daniel D. An Update on the HS Computing Landscape (Workshop), CS4HS @ UCLA, LA, CA, July 22, 2010.
- 52. Shipman, Frank; Furuta, Richard; Carpenter, Stephen; Cassel, Lilian; Fox, Edward; Delcambre, Lois; Brusilovsky, Peter; Hislop, Gregory; Edwards, Stephen; and Garcia, Daniel. Ensemble: A Distributed Portal for the Distributed Community of Computing Education (Poster), *European Conference on Digital Libraries (ECDL 2010)*, Glasgow, Poland, Sep 6-10, 2010.
- 53. Garcia, Daniel D. Games, Puzzles, Patterns! (Special Session), Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) National Conference 2010, Anaheim, CA, October 1, 2010.
- 54. Segars, Luke; Garcia, Daniel D.; Brusilovsky, Peter; Cassel, Lillian; Delcambre, Lois; Fox, Ed; Furuta, Richard; Hislop, Greg; and Shipman, Frank. Social Computing in the Ensemble Pathway (Special Session), *NSDL Annual Meeting 2010*, Washington, DC, November 2, 2010.
- 55. Garcia, Daniel D.; Harvey, Brian; Lewis, Colleen; Rosenberg, Joel; Sugden, Glenn; Klein, Dan; Goldberg, Ken; Hutton, Michele. CS Education Day @ Cal 2010 (workshop), *CS Education Week 2010*, Berkeley, CA, December 7, 2010.
- 56. Cuny, Jan; Astrachan, Owen; Simon, Beth; and Garcia, Daniel D. The CS10K Project: UC Berkeley's CS10: The Beauty and Joy of Computing (Panel), *Computing Education for the 21st Century Community Meeting*, New Orleans, LA, January 30 Feb 1, 2011.
- 57. Cuny, Jan; Astrachan, Owen; Snyder, Larry; Garcia, Daniel D. and Stephenson, Chris. The AP CS Principles and CS10K Project (Panel), *ACM Education Council Meeting*, Miami, FL, Feb 6-7, 2011.
- 58. Dunklau, Bill; Garcia, Daniel D.; Dahlberg, Teresa; Stephenson, Chris and Paul, Jody; What is the Future of AP Computer Science? (Panel), *TCEA 2011*, Austin, TX, Feb 7-11, 2011.
- 59. Segars, Luke; Garcia, Daniel D.; Brusilovsky, Peter; Carpenter, Steve; Cassel, Lillian; Delcambre, Lois M. L.; Edwards, Steve; Fox, Edward A.; Furuta, Richard; Hislop, Gregory; Hsieh, Haowei and Shipman, Frank. Engaging Participants in the Ensemble Computing Pathway (Poster), *SIGCSE 2011*, Dallas, TX, March 9-12, 2011.

- 60. Brusilovsky, Peter; Carpenter, Steve; Cassel, Lillian; Delcambre, Lois M. L.; Edwards, Steve; Fox, Edward A.; Furuta, Richard; Garcia, Daniel D.; Hislop, Gregory; Hsieh, Haowei and Shipman, Frank Ensemble: Connecting Computing Educators (NSDL) (NSF Showcase), *SIGCSE 2011*, Dallas, TX, March 9-12, 2011.
- 61. Astrachan, Owen; Barnes, Tiffany; Garcia, Daniel D.; Paul, Jody; Simon, Beth; and Snyder, Larry. CS Principles: Piloting a New Course at National Scale (Special Session), *SIGCSE 2011*, Dallas, TX, March 9-12, 2011.
- 62. Boustedt, Jonas; McCartney, Robert; Tenenberg, Josh; Cooper, Stephen; Garcia, Daniel D.; Hutton, Michelle; Parlante, Nick; Richards, Brad. It Seemed Like a Good Idea at the Time (Special Session), *SIGCSE* 2011, Dallas, TX, Mar 9-12, 2011.
- 63. Garcia, Daniel D.; Dodds, Zachary; Huang, Timothy; and Rebelsky, Samuel A. Teaching Tips We Wish They'd Told Us Before We Started, Small College Class Edition (Panel), *SIGCSE 2011*, Dallas, TX, March 9-12, 2011.
- 64. Garcia, Daniel D.; Hutton, Michelle Friend; Lemon, Eugene; and Paley, Josh. Rediscovering the Passion, Beauty, Joy, and Awe: Making Computing Fun Again, part 4 (Panel), *SIGCSE 2011*, Dallas, TX, March 9-12, 2011.
- 65. Clancy, Michael; Garcia, Daniel D.; and Titterton, Nathaniel. Explore, customize, and create: Getting your hands dirty with UC Berkeley's lab-centric curricula (Workshop), SIGCSE 2011, Dallas, TX, March 9-12, 2011.
- 66. Harvey, Brian; Garcia, Daniel D.; Lewis, Colleen; Segars, Luke; and Paley, Josh. Build Your Own Blocks: A Scratch Extension for CS Courses for Non-Majors (Workshop), SIGCSE 2011, Dallas, TX, March 9-12, 2011.
- 67. Garcia, Daniel D.; Bailes, Don and Fincher, Sally. Technology that Educators of Computing Hail (TECH) site in the Ensemble Computing Portal (Birds of a Feather), *SIGCSE 2011*, Dallas, TX, March 9-12, 2011.
- 68. Goode, Joanna; Chapman, Gail and Garcia, Daniel D. Courses: CS AP, CS Principles, Exploring CS, relevant CTE courses, etc. (Panel), *California CS Ed Policy Advocacy Network Meeting*, Irvine, CA, March 21, 2011
- 69. Garcia, Daniel D. 274 Students Can't Be Wrong! GamesCrafters, a Computational Game Theory Undergraduate Research and Development Group at UC Berkeley (Workshop), *CAHSI Annual Meeting*, San Juan, Puerto Rico, March 27-29, 2011
- 70. Garcia, Daniel D. The Joys and Challenges of Multiracialism (Birds of a Feather), *The Richard Tapia Celebration of Diversity in Computing Conference 2011*, San Francisco, CA, April 3-4, 2010.
- 71. Hislop, Gregory W.; Cassel, Lillian N.; Delcambre, Lois M. L.; Fox, Edward A.; Furuta, Richard; Brusilovsky, Peter, Garcia, Daniel D. Sharing Your Instructional Materials via Ensemble (Workshop), *CCSCNE 2011*, Springfield, MA, April 16, 2011.
- 72. Garcia, Daniel D. and Lewis, Colleen M. A Summer Workshop for middle- and high-school computing teachers (Workshop), CS4HS @ Cal 2011, Berkeley, CA, June 20-21, 2011.
- 73. Garcia, Daniel D. CS10: The Beauty and Joy of Computing (Panel) *Strategies for Assessing Student Work: UC Online Instruction Pilot Project Conference on Course Design and Development*, Berkeley, CA, June 25, 2011.
- 74. Garcia, Daniel D.; and Paley, Josh. Build Your Own Blocks: A Scratch-based Language for Computer Science (Workshop), CSTA Computer Science & Information Technology Symposium, NY, NY, July 11-13, 2011.
- 75. Richardson, Debra J.; Garcia, Daniel D.; Paley, Josh; Ericson, Barb; Guzdial, Mark; and Kmoch, Joseph. CS Education Week 2011: A Call to Action (Panel), CSTA CS & IT Symposium, New York, NY, July 11-13, 2011.
- 76. Garcia, Daniel D. and Harvey, Brian. CS10 in HS (Workshop), Summer Professional Development for High School Teachers to teach The Beauty and Joy of Computing, Berkeley, CA, June 22, 2011 + Aug 15-19, 2011.
- 77. Garcia, Daniel D.; Barnes, Tiffany; and Pickford, Shaun. AP CS Principles and The Beauty and Joy of Computing (Workshop), *STARS Celebration 2011*, Raleigh, NC, August 7-10, 2011
- 78. Garcia, Daniel D. Faculty Perspectives on Teaching: Science, Math and Engineering (Panel) *GSI Teaching and Resource Center Fall 2011 Teaching Conference for First-Time GSIs*, Berkeley, CA, August 19, 2011.
- 79. Garcia, Daniel D. Best Practices Using Piazza (Panel) at *GSI Teaching and Resource Center Social Media Workshop*, Berkeley, CA, September 8, 2011.
- 80. Garcia, Daniel D. Never Lose Again! Solving the World's Board Games with Computational Game Theory in Motion Planning and Game Theory Scientific Symposia session (Special Session), Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) National Conference 2011, San Jose, CA, October 28, 2011.
- 81. Garcia, Daniel D. Engaging Participants in the Ensemble Computing Pathway in Collaboration in Computer Science Scientific Symposia session (Special Session), Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) National Conference 2011, San Jose, CA, October 28, 2011.

- 82. Barnes, Tiffany; Briggs, Amy; Cuny, Jan; Garcia, Daniel D.; Paul, Jody and Stephenson, Chris. The CS 10K Project: Transforming High School Computing for Broader Participation (Panel) *Grace Hopper Celebration of Women in Computing 2011*, Portland, OR, November 10, 2011.
- 83. Garcia, Daniel D.; Harvey, Brian; Lewis, Colleen; Segars, Luke; Sugden, Glenn; Abbeel, Peter; Culler, David; Doyle, Fiona. CS Education Day @ Cal 2011 (Workshop), CS Education Week 2011, Worldwide, 2011-12-06
- 84. Astrachan, Owen; Briggs, Amy; Uche, Chinma; Dovi, Rebecca; Garcia, Daniel D.; Simon, Beth; and Chakravarty, Auditi. AP CS Principles (Panel), 2012 CE21 PI and Community Meeting, Washington, DC, February 2-3, 2012.
- 85. Garcia, Daniel D. and Harvey, Brian. The Beauty and Joy of Computing (BJC), AP CS Principles, and the CS 10K Effort (Special Session) *Educating for Careers High School CTE conference*, Sacramento, CA, 2012-02-13
- 86. Garcia, Daniel D.; 7 others. Teaching Parallelism Lightning Rounds: Teaching Concurrency to Non-majors using BYOB in Beauty and Joy of Computing (Special Session), *SIGCSE 2012*, Raleigh, NC, March 1-3, 2012.
- 87. Garcia, Daniel D.; Harvey, Brian; Barnes, Tiffany. FRABJOUS CS (NSF Showcase), *SIGCSE 2012*, Raleigh, NC, Mar 3, 2012.
- 88. Garcia, Daniel D.; Ginat, David. Demystifying Computing w/Magic (Special Session), *SIGCSE 2012*, Raleigh, NC, March 1-3, 2012.
- 89. Garcia, Daniel D.; Ericson, Barbara; Goode, Joanna; and Lewis, Colleen. Rediscovering the Passion, Beauty, Joy, and Awe: Making Computing Fun Again, part 5 (Panel), *SIGCSE 2012*, Raleigh, NC, March 1-3, 2012.
- 90. Harvey, Brian; Garcia, Daniel D.; Paley, Josh; and Segars, Luke. Snap! (Build Your Own Blocks) (Workshop), *SIGCSE 2012*, Raleigh, NC, March 1-3, 2012.
- 91. Garcia, Daniel D.; Harvey, Brian; Titterton, Nathaniel; Segars, Luke; Lemon, Eugene; Morris, Sean; Paley, Josh. AP CS Principles and The Beauty and Joy of Computing Curriculum (Workshop), *SIGCSE 2012*, Raleigh, NC, March 1-3, 2012.
- 92. Garcia, Daniel D. and Segars, Luke. Technology that Educators of Computing Hail (TECH): Come, share your favorites! (Birds of a Feather), *SIGCSE 2012*, Raleigh, NC, March 1-3, 2012.
- 93. Garcia, Daniel D.; Paul, Jody; and Sherriff, Mark S. Teaching Track Faculty in CS (Birds of a Feather), *SIGCSE* 2012, Raleigh, NC, March 1-3, 2012.
- 94. Gates, Ann; Garcia, Daniel D.; Isbel, Charles; Metoyer, Ron and Naveda, Fernando. Navigating through the Promotion and Tenure Process (Panel) *NSF Workshop in Computing for Underrepresented Ethnic Minorities and People with Disabilities*, Atlanta, GA, March 16, 2012.
- 95. Garcia, Daniel D., Kramsch, Claire. Preparing Future Faculty: How to Teach a Large Course (Panel) *GSI Teaching and Resource Center Spring 2012 Teaching Workshops*, Berkeley, CA, March 19, 2012.
- 96. Garcia, Daniel D. The Beauty and Joy of Computing (BJC), AP CS Principles, and the CS 10k effort (Keynote), *Consortium for Computing Sciences in Colleges : Southwestern Region conference 2012*, Stockton, CA, March 23-24, 2012.
- 97. Garcia, Daniel D.; Paley, Josh; and Segars, Luke. Snap! (Build Your Own Blocks) (Workshop), *Consortium for Computing Sciences in Colleges: Southwestern Region conference 2012*, Stockton, CA, March 23-24, 2012.
- 98. Garcia, Daniel D. The Beauty and Joy of Computing (BJC), AP CS Principles, and the CS 10k effort (Keynote), *Consortium for Computing Sciences in Colleges : Central Plains Region conference 2012*, Springfield, MO, March 30, 2012.
- 99. Garcia, Daniel D. Snap! (Build Your Own Blocks) (Workshop), *Consortium for Computing Sciences in Colleges: Central Plains Region conference 2012*, Springfield, MO, March 30, 2012.
- 100. Garcia, Daniel D. The Beauty and Joy of Computing (BJC), AP CS Principles, and the CS 10k effort (Keynote), Summit on Transforming High School Computer Science Education in Puerto Rico, San Juan, PR, April 13, 2012.
- 101.Garcia, Daniel D. Snap! (Build Your Own Blocks) (Workshop), *Summit on Transforming High School Computer Science Education in Puerto Rico*, San Juan, PR, April 13, 2012.
- 102. Garcia, Daniel D. The Beauty and Joy of Computing (BJC) (Week-long Workshop), CE21 FRABJOUS CS PD for HS teachers, San Juan, PR, June 4-8, 2012.
- 103. Garcia, Daniel D., Sugden, Glenn, and Fraser, Neil. *CS4HS @ Cal 2012* (2-day Workshop), Berkeley, CA, June 20-21, 2012.
- 104. Garcia, Daniel D. The Beauty and Joy of Computing (BJC) (Week-long Workshop), HAEF Summer School, Athens, Greece, June 25-29, 2012.

- 105. Harvey, Brian and Garcia, Daniel D. Snap! and the Beauty and Joy of Computing (Workshop), CSTA Computer Science & Information Technology Symposium, Irvine, CA, July 9-10, 2012.
- 106. Harvey, Brian and Garcia, Daniel D. Snap! and the Beauty and Joy of Computing curriculum (Self-organizing session), *Scratch 2012*, Cambridge, MA, July 26-27, 2012.
- 107. Harvey, Brian and Garcia, Daniel D. Snap! A Grownup Programming Language Based on Scratch (Poster), *Scratch 2012*, Cambridge, MA, July 26-27, 2012.
- 108. Harvey, Brian and Garcia, Daniel D. The Beauty and Joy of Computing Curriculum and the AP CS: Principles Project (Workshop), *Scratch 2012*, Cambridge, MA, July 26-27, 2012.
- 109. Garcia, Daniel D. Building Dymanics Groups Broken Squares Activity (mini-Workshop). *BFOIT Summer Institute*, Berkeley, CA, August 3, 2012.
- 110.Garcia, Daniel D. Improving Our Positions (Special Session), *UC Computer Science Lecturers Summit 2012*, Irvine, CA, August 11, 2012.
- 111. Garcia, Daniel D.; Hull, Glynda; and Loughridge, Deirdre. Piazza, the single source of truth for a class (Panel), *Teaching Excellence Colloquium*, Berkeley, CA, September 21, 2012.
- 112.Garcia, Daniel D.; Harvey, Brian; and EECS staff. *CS Education Day @ Cal 2012 (All-day Workshop)*, part of CS Education Week 2012, Worldwide, December 4, 2012.
- 113. Garcia, Daniel D.; Fox, Armando; Abbeel, Pieter; Patterson, David; and Song, Dawn. Online Education, edX (Panel), *EECS Joint Colloquium*, Berkeley, CA, December 5, 2012.
- 114. Garcia, Daniel D.; Harvey, Brian; Barnes, Tiffany and Titterton, Nate. Framing a Rigorous Approach to Beauty and Joy for Outreach to Underrepresented Students in Computing at Scale (FRABJOUS) (Poster), 2013 CE21 Pl and Community Meeting, Portland, OR, January 15-16, 2013.
- 115. Garcia, Daniel D.; Titterton, Nate. Building the Online Community of Practice with Facilitators (Special Session), 2013 CE21 Pl and Community Meeting, Portland, OR, January 15-16, 2013.
- 116. Garcia, Daniel D. Explore and Delineate CS and Multidisciplinary Research Agenda (Workshop), *CRA/CCC Sponsored Workshop on Multidisciplinary Research for Online Education*, Washington, DC, February 11-12, 2013.
- 117. Sherriff, Mark S.; Garcia, Daniel D.; and Paul, Jody Teaching Track Faculty in CS (Birds of a Feather), *SIGCSE* 2013, Denver, CO, March 6-9, 2013.
- 118.Garcia, Daniel D. and Armendariz, Dan. Technology that Educators of Computing Hail (TECH): Come, share your favorites! (Birds of a Feather), *SIGCSE 2013*, Denver, CO, March 6-9, 2013.
- 119. Harvey, Brian; Garcia, Daniel D.; Barnes, Tiffany; Titterton, Nathaniel; Armendariz, Dan; Segars, Luke; Lemon, Eugene; Morris, Sean; and Paley, Josh. Snap! (Build Your Own Blocks) (Workshop), *SIGCSE 2013*, Denver, CO, March 6-9, 2013.
- 120.Garcia, Daniel D.; Harvey, Brian; Barnes, Tiffany; Titterton, Nathaniel; Armendariz, Dan; Segars, Luke; Lemon, Eugene; Morris, Sean; and Paley, Josh. AP CS Principles and The Beauty and Joy of Computing Curriculum (Workshop), *SIGCSE 2013*, Denver, CO, March 6-9, 2013.
- 121.Garcia, Daniel D.; Ginat, David. Demystifying Computing with Magic, continued (Special Session) *SIGCSE* 2013, Denver, CO, March 6-9, 2013.
- 122. Garcia, Daniel D.; Barr, Valerie; Guzdial, Mark; and Malan, David J. Rediscovering the Passion, Beauty, Joy, and Awe: Making Computing Fun Again, part 6 (Panel), *SIGCSE 2013*, Denver, CO, March 6-9, 2013.
- 123. Garcia, Daniel D.; Moss, LTC Mark; Santiago, Nadya; Forbes, Jeff; and Gates, Ann. Effective Teaching (Panel), Academic Career Workshop for Underrepresented Junior Faculty and Senior Graduate Students, Chicago, IL, April 11-14, 2013.
- 124. Garcia, Daniel D.; Vishwanath, Venkat; Morales, Jose; and Moss, LTC Mark. Alternative Careers (Panel), Academic Career Workshop for Underrepresented Junior Faculty and Senior Graduate Students, Chicago, IL, April 11-14, 2013.
- 125. Garcia, Daniel D.; Johnson, Terry; Yamanaka, Keiko; Fitch, Todd; and Etter, Stephen. Transforming K-12 CS: The Beauty and Joy of Computing (Panel), *NOVUM: A New Look at Yourself, Society, and the World*, Berkeley, CA, May 2, 2013.
- 126.Garcia, Daniel D. The Beauty and Joy of Computing (BJC) (Week-long Workshop), *HAEF IC Summer School*, Athens, Greece, June 17-21, 2013.
- 127. Garcia, Daniel D. and Sugden, Glenn. CS4HS @ Cal (2-day Workshop), Berkeley, CA, June 27-28, 2013.

- 128. Garcia, Daniel D. Beauty and Joy of Computing and Snap! (1-day Workshop), *TEALS PD*, Seattle, WA, June 29, 2013.
- 129. Garcia, Daniel D. Using Magic to Teach CS (Special Session), CSTA Annual Conference, Quincy, MA, July 15-16, 2013.
- 130. Garcia, Daniel D. Transforming K-12 CS: The Beauty and Joy of Computing (Panel), *Scratch @ Barcelona*, Barcelona, Spain, July 25-27, 2013.
- 131.Garcia, Daniel D.; Fox, Pamela; Vedati, Krishna; Keeshin, Jeremy; and Fraser, Neil. Teaching Beginners to Code, Online. (Panel) *ACM Ed Council Meeting*, San Francisco, CA, November 2, 2013.
- 132. Jones, Van; Garcia, Daniel D.; Cottom, Tressie McMillan; Ravaglia, Raymond, Stiglitz, Julia. MOOCs. (Panel) *Fairness Matters Forum 2013*, San Francisco, CA, November 7, 2013.
- 133. Garcia, Daniel D.; Harvey, Brian; and EECS staff. *CS Education Day @ Cal 2013 (All-day Workshop)*, part of CS Education Week 2012, Worldwide, December 10, 2013.
- 134.Garcia, Daniel D. Transforming K-12 CS: The Beauty and Joy of Computing (Flashtalk), 2014 CE21 PI and Community Meeting, Orlando, Fl, January 8, 2014.
- 135. Garcia, Daniel D. The Beauty and Joy of Computing (One-day Workshop), *Richard Tapia Celebration of Diversity in Computing Conference*, Seattle, WA, Feb 8, 2014.
- 136.Garcia, Daniel D.; Ball, Michael; Arvai, Eric. Best Practices for MOOC video (Demo), *Learning @ Scale 2014*, Atlanta, GA March 4-5, 2014.
- 137.Armendariz, Dan; MacHardy, Zachary; and Garcia, Daniel D. OCTAL: Online Course Tool for Adaptive Learning (Poster), *Learning @ Scale 2014*, Atlanta, GA March 4-5, 2014.
- 138.Rogers, Stephanie; Canny, John; Tang, Steven and Garcia, Daniel D. Automatic Coding Composition Evaluator (Poster), *Learning @ Scale 2014*, Atlanta, GA March 4-5, 2014.
- 139.Garcia, Daniel D.; Franke, Baker; Hoeppner, Stephanie; Paley, Josh. Teaching Tips We Wish They'd Told Us Before We Started, High School Edition (Panel), *SIGCSE 2014*, Atlanta, GA, March 5-8, 2014.
- 140. Garcia, Daniel D.; Campbell, Jennifer; Dovi, Rebecca; and Horstmann, Cay. Rediscovering the Passion, Beauty, Joy, and Awe: Making Computing Fun Again, part 7 (Panel), *SIGCSE 2014*, Atlanta, GA, March 5-8, 2014.
- 141.Garcia, Daniel D.; Harvey, Brian; Barnes, Tiffany. FRABJOUS CS (NSF Showcase), *SIGCSE 2014*, Atlanta, GA, March 5-8, 2014.
- 142.Cuny, Jan; Baxter, Diane A.; Garcia, Daniel D.; Gray, Jeff; Morelli, Ralph. CS Principles Professional Development: Only 9,500 to go! Lessons Learned from our CS10K Summer 2013 PD (Panel), SIGCSE 2014, Atlanta, GA, March 5-8, 2014.
- 143. Sherriff, Mark S.; Garcia, Daniel D.; and Paul, Jody Teaching Track Faculty in CS (Birds of a Feather), *SIGCSE* 2014, Atlanta, GA, March 5-8, 2014.
- 144. Garcia, Daniel D. and Armendariz, Dan. Technology that Educators of Computing Hail (TECH): Come, share your favorites! (Birds of a Feather), *SIGCSE 2014*, Atlanta, GA, March 5-8, 2014.
- 145. Rogers, Stephanie; Tang, Steven and Garcia, Daniel D. Automatic Coding Composition Evaluator (Poster), *SIGCSE 2014*, Atlanta, GA, March 5-8, 2014.
- 146.Armendariz, Dan; MacHardy, Zachary; and Garcia, Daniel D. OCTAL: Online Course Tool for Adaptive Learning (Poster), *SIGCSE 2014*, Atlanta, GA, March 5-8, 2014.
- 147.McKinsey, Jonathan; Joseph, Samuel; and Garcia, Daniel D. Remote Pair Programming (RPP) in Massively Open Online Courses (MOOCs) (Poster), *SIGCSE 2014*, Atlanta, GA, March 5-8, 2014.
- 148. Garcia, Daniel D.; Harvey, Brian; Barnes, Tiffany; Titterton, Nathaniel; Armendariz, Dan; Segars, Luke; Lemon, Eugene; Morris, Sean; and Paley, Josh. AP CS Principles and The Beauty and Joy of Computing Curriculum (Workshop), *SIGCSE 2014*, Atlanta, GA, March 5-8, 2014.
- 149. Harvey, Brian; Garcia, Daniel D.; Barnes, Tiffany; Titterton, Nathaniel; Armendariz, Dan; Segars, Luke; Lemon, Eugene; Morris, Sean; and Paley, Josh. Snap! (Build Your Own Blocks) (Workshop), *SIGCSE 2014*, Atlanta, GA, March 5-8, 2014.
- 150.Garcia, Daniel D.; Moss, LTC Mark; Alvarado, Christine; and Gates, Ann. Effective Teaching (Panel),

 Academic Career Workshop for Underrepresented Junior Faculty and Senior Graduate Students, Chicago, IL,

 March 27, 2014.

- 151.Garcia, Daniel D.; Marzullo, Keith; Cook, Jeanine; Morales, Jose Andre; and Moss, LTC Mark. Alternative Careers (Panel), *Academic Career Workshop for Underrepresented Junior Faculty and Senior Graduate Students*, Chicago, IL, March 27, 2014.
- 152.Pink, Timothy; Garcia, Daniel D.; Santiago, Nayda; Isbell, Charles; and Blake, Brian. Applying and Interviewing for Academic Positions (Panel), *Academic Career Workshop for Underrepresented Junior Faculty and Senior Graduate Students*, Chicago, IL, March 27, 2014.
- 153. Garcia, Daniel D. and 2014 GamesCrafters. GamesCrafters Demo. *Cal Day 2014 (All-morning Workshop)*, April 12, 2014.
- 154.Garcia, Daniel D.; Friedland, Gerald; Morgan, Bryan; Egelman, Serge; and Bernd, Julia. Teaching Privacy Demo. *Cal Day 2014 (Workshop)*, April 12, 2014.
- 155. Garcia, Daniel D. and Lemon, Eugene. CS4HS @ Cal (2-day Workshop), Berkeley, CA, June 20-21, 2014.
- 156.Garcia, Daniel D. The Beauty and Joy of Computing (BJC) (week-long Workshop), CE21 FRABJOUS CS PD for HS teachers, Berkeley, CA, June 23-27, 2014.
- 157. Garcia, Daniel D. and Morreale, Patricia. The Beauty and Joy of Computing (BJC) (week-long Workshop), Union, NJ, July 7-11, 2014.
- 158.Garcia, Daniel D. Transforming K-12 CS: The Beauty and Joy of Computing (Flashtalk), *AP CS Principles Pilot Meeting*, Philadelphia, PA, July 9, 2014.
- 159. Garcia, Daniel D.; and Titterton, Nate. A Programming Approach to the CS: Principles "Data" Task (Special Session), CSTA Computer Science & Information Technology Symposium, St. Charles, IL, July 11-13, 2014.
- 160.Garcia, Daniel D.; and Titterton, Nate. The Beauty and Joy of Computing (BJC) (One-day Workshop), CSTA Computer Science & Information Technology Symposium, St. Charles, IL, July 17, 2014.
- 161. Cuny, Jan; Century, Jeanne, Garcia, Daniel D.; and Hambrusch, Susanne. CS Education in K-12 at the National Scale, (Special Session), *CRA Snowbird Conference*, Snowbird, UT, July 21, 2014.
- 162.Garcia, Daniel D.; Paley, Josh; and Morris, Sean. The Beauty and Joy of Computing (BJC) (Week-long Workshop), CE21 FRABJOUS CS PD for HS teachers, Berkeley, CA, July 28-Aug 1, 2014.
- 163. Garcia, Daniel D. The Beauty and Joy of Computing (BJC) and the Snap! programming language (One-day Workshop), *Scratch 2014 Conference*, Cambridge, MA, Aug 6, 2014.
- 164. Garcia, Daniel D. Using Snap! to teach the Big Idea of "Data" (Ignite Talk), *Scratch 2014 Conference*, Cambridge, MA, Aug 9, 2014.
- 165. Garcia, Daniel D. Faculty Perspectives on Teaching Science, Math and Engineering (Panel) *GSI Teaching and Resource Center Fall 2014 Teaching Workshops*, Berkeley, CA, August 22, 2014.
- 166. Garcia, Daniel D. Games Crafters: Engaging Undergraduates with Computational Game Theory (Fireside Chat) *Simons Institute Staff Workshops*, Berkeley, CA, October 3, 2014.
- 167. Garcia, Daniel D. The Beauty and Joy of Computing (BJC) (Keynote), *AdvanceKentucky Fall Forum*, Louisville, KY, November 22, 2014.
- 168.Garcia, Daniel D. The Beauty and Joy of Computing (BJC) (Half-day Workshop), *AdvanceKentucky Fall Forum*, Louisville, KY, November 22, 2014.
- 169. Daniel D. Garcia. GamesCrafters (All-day workshop). CS Education Day @ Cal, Berkeley CA, 2014-12-09.
- 170. Pérez-Quiñones, Manuel A.; Morales, Jose A.; and Garcia, Dan. Hispanics in Computing Community (Birds of a Feather), *The Richard Tapia Celebration of Diversity in Computing Conference 2014*, Boston, MA, February 18-20, 2015.
- 171. Garcia, Dan. A Programming Approach to the CS Principles Data Task (Special Session), *The Richard Tapia Celebration of Diversity in Computing Conference 2014*, Boston, MA, February 18-20, 2015.
- 172. Garcia, Dan. The Beauty and Joy of Computing (Presentation), *TEDxBerkeley 2015*, Berkeley, CA, February 28, 2015.
- 173. Daniel D. Garcia, Owen Astrachan, Bennett Brown, Jeff Gray, Calvin Lin, Bradley Beth, Ralph Morelli, Marie desJardins, and Nigmanath Sridhar. 2015. Computer Science Principles Curricula: On-the-ground; adoptable; adaptable; approaches to teaching (Special Session). In *Proceedings of the 46th ACM Technical Symposium on Computer Science Education (SIGCSE '15)*. ACM, New York, NY, USA, 176-177. DOI: https://doi.org/10.1145/2676723.2677323
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- 177. Gerald Friedland, Serge Egelman, Daniel Garcia, and Blanca Gordo. Teachers' Resources for Online Privacy Education (NSF Showcase). *SIGCSE '15*, Kansas City, MO, March 4-7, 2015.
- 178.Mark Sherriff and Daniel Garcia. 2015. Teaching Track Faculty in CS (Birds of a Feather). In *Proceedings of the 46th ACM Technical Symposium on Computer Science Education (SIGCSE '15)*. ACM, New York, NY, USA, 694-694. DOI: https://doi.org/10.1145/2676723.2691852
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- 182. Daniel D. Garcia, Brian Harvey, Tiffany Barnes, June Mark, Paul Goldenberg, and Mary Fries. The Beauty and Joy of Computing (BJC) (week-long Workshop), New York City, NY, April 6-10, 2015.
- 183.Bryant York, Dan Garcia, Ann Gates, Ron Metoyer, and Valerie Taylor. Demystifying the Promotion and Tenure Process (Panel) *Academic Career Workshop for Underrepresented Junior Faculty and Senior Graduate Students*, Houston, Tx, May 1-3, 2015.
- 184. Dan Garcia, Jeff Forbes, Ann Gates, and Bryant York. Effective Teaching (Panel) *Academic Career Workshop for Underrepresented Junior Faculty and Senior Graduate Students*, Houston, Tx, May 1-3, 2015.
- 185. Dan Garcia, Jeanine Cook, and Jose Morales. Alternative Careers (Panel) *Academic Career Workshop for Underrepresented Junior Faculty and Senior Graduate Students*, Houston, Tx, May 1-3, 2015.
- 186. Dan Garcia, Ilya Hicks, and Valerie Taylor. Applying and Interviewing for Academic Positions (Panel)

 Academic Career Workshop for Underrepresented Junior Faculty and Senior Graduate Students, Houston,
 Tx, May 1-3, 2015.
- 187. Daniel D. Garcia and Eugene Lemon. A two-day workshop for middle- and high-school computing teachers (Workshop, Conference Organizing), *CS4HS @ Cal 2015*, Berkeley, CA, June 18-19, 2015.
- 188. Daniel D. Garcia. The Beauty and Joy of Computing (BJC) (week-long Workshop), NYC, NY, July 6-10, 2015.
- 189. Daniel D. Garcia, Tiffany Barnes, Eugene Lemon, Sean Morris and Josh Paley. Beauty and Joy of Computing (CS Principles) on edX (Workshop), CSTA Annual Conference 2015, Grapevine, TX, July 12-14, 2015.
- 190. Daniel D. Garcia, Owen Astrachan, Dan Garcia, Bennett Brown, Jeff Gray, Ralph Morelli, Nigamanth Sridhar and Baker Franke. Computer Science Principles Curricula (Panel), *CSTA Annual Conference 2015*, Grapevine, TX, July 12-14, 2015.
- 191.Alexis Martin, Frieda McAlear, Dan Garcia, Jennifer Arguello, Tiffany Price and Omoju Miller. Engaging Underrepresented Youth in Computer Science (Panel), *CSTA Annual Conference 2015*, Grapevine, TX, July 12-14, 2015.
- 192. Fran Trees, Richard Kick, Andrew Kuemmel, Deepa Muralidhar, Dan Garcia, Lester Wainwright, Glen Martin, Sandy Czajka, Paul Tymann and Lien Diaz. Achieving a Shared Goal with AP Computer Science A and AP Computer Science Principles (Panel), CSTA Annual Conference 2015, Grapevine, TX, July 12-14, 2015.
- 193. Egelman, Serge; Friedland, Gerald; Bernd, Julia; Garcia, Dan; and Gordo, Blanca. The Teaching Privacy Curriculum (Lightning Talk), Workshop on Usable Privacy and Security Education @ the Symposium on Usable Privacy and Security (SOUPS), Ottawa, Canada, July 22-24, 2015.

- 194. Daniel D. Garcia, Brian Harvey, Tiffany Barnes, June Mark, Paul Goldenberg, and Mary Fries. The Beauty and Joy of Computing (BJC) (week-long Workshop), New York City, NY, August 3-7, 2015.
- 195. Dan Garcia, Brian Harvey, Jens Moenig, and Michael Ball. The Beauty and Joy of Computing (Workshop), *Scratch 2015*, Amsterdam, Netherlands, August 12-16, 2015.
- 196. Dan Garcia, Brian Harvey, Jens Moenig, and Michael Ball. Bringing the Beauty and Joy of Computing to the World via edX (Special Session), *Scratch* 2015, Amsterdam, Netherlands, August 12-16, 2015.
- 197. Dan Garcia, Brian Harvey, Jens Moenig, and Michael Ball. The Beauty and Joy of Computing and the Snap! programming language (Poster), *Scratch 2015*, Amsterdam, Netherlands, August 12-16, 2015.
- 198. Dan Garcia. Creating a mobile app in 90 seconds! (Lightning Talk), *Scratch 2015*, Amsterdam, Netherlands, August 12-16, 2015.
- 199. Daniel D. Garcia and Brian Harvey. The Beauty and Joy of Computing (BJC) (day-long Workshop), Seoul, South Korea, December 4, 2015.
- 200. Daniel D. Garcia. GamesCrafters (All-day workshop). CS Education Day @ Cal, Berkeley CA, 2015-12-08.
- 201.Deepa Muralidhar, Dan Garcia, Mark Guzdial and Jill Westerlund. Pseudocode and Flowcharts (Podcast). *CS Principles Webinar, hosted by CSforALLTeachers.org*, 2016-01-26
- 202. Daniel D. Garcia, Josh Caldwell, Pamela Fox, and Jeremy Keeshin. 2016. Rediscovering the Passion, Beauty, Joy, and Awe: Making Computing Fun Again (Panel), part 8. In *Proceedings of the 47th ACM Technical Symposium on Computing Science Education (SIGCSE '16)*. ACM, New York, NY, USA, 80-81. DOI: https://doi.org/10.1145/2839509.2844659
- 203. Daniel D. Garcia and David Ginat. 2016. Demystifying Computing with Magic, part III (Special Session). In *Proceedings of the 47th ACM Technical Symposium on Computing Science Education (SIGCSE '16)*. ACM, New York, NY, USA, 158-159. DOI: https://doi.org/10.1145/2839509.2844679
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- 211.Michael A. Ball and Daniel D. Garcia. 2016. Autograding and Feedback for Snap!: A Visual Programming Language (Poster). In *Proceedings of the 47th ACM Technical Symposium on Computing Science Education (SIGCSE '16)*. ACM, New York, NY, USA, 692-692. DOI: https://doi.org/10.1145/2839509.2850572

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- 213. Dan Garcia. Transforming K-12 CS: The Beauty and Joy of Computing (Flashtalk), *CCSC-SW @ Stanford University*, Palo Alto, CA, 2016-03-25.
- 214. Jan Cuny, Dan Garcia, and Art Lopez. Why Latino Students Need Computer Science Now (Panel), *College Board Prepárate Conference*, New York, NY, 2016-04-18.
- 215. Daniel D. Garcia, Brian Harvey, Tiffany Barnes, June Mark, Paul Goldenberg, and Mary Fries. The Beauty and Joy of Computing (BJC) (half-week Workshop), New York City, NY, April 25-27, 2016.
- 216. Dan Garcia, John Kembel and Stephanie Santoso. Success in a Digital World (Panel), *InfoSys Crossroads Conference 2016*, San Francisco, CA, 2016-04-29.
- 217. Daniel D. Garcia. 2016. Transforming HS CS Education: The Beauty and Joy of Computing (Keynote). The 21st Western Canadian Conference on Computing Education (WCCCE '16). Kamloops, BC, Canada, 2018-05-06.
- 218. Daniel D. Garcia. 2016. Transforming HS CS Education: The Beauty and Joy of Computing (Workshop). The 21st Western Canadian Conference on Computing Education (WCCCE '16). Kamloops, BC, Canada, 2018-05-06.
- 219. Daniel D. Garcia and Tiffany Barnes. The Beauty and Joy of Computing (BJC) Train-the-trainers (One-day Workshop), Las Vegas, NV, 2016-05-14.
- 220. Daniel D. Garcia and Lauren Mock. A two-day workshop for middle- and high-school computing teachers (Workshop, Conference Organizing), CS4SFBayArea @ Cal 2016, Berkeley, CA, June 23-24, 2016.
- 221. Daniel D. Garcia. The Beauty and Joy of Computing (BJC) (week-long Workshop), NYC, NY, July 11-15, 2015.
- 222. Daniel D. Garcia. Transforming K-12 Computer Science: The Beauty and Joy of Computing (Keynote), *Peking University First Computer Science Education Research Conference*, Beijing, China, July 22, 2016.
- 223. Daniel D. Garcia. Tiny Turing Machine (Poster), Scratch Conference 2016, Cambridge, MA, 2016-08-04.
- 224. Daniel D. Garcia and Michael Ball. Bringing the Beauty and Joy of Computing to the world via edX: An experience report (Panel), *Scratch Conference 2016*, Cambridge, MA, 2016-08-05.
- 225. Daniel D. Garcia, Brian Harvey and Jens Moenig. Snap! and the Beauty and Joy of Computing (Panel), *Scratch Conference 2016*, Cambridge, MA, 2016-08-05.
- 226. Daniel D. Garcia, Brian Harvey, Tiffany Barnes, June Mark, Paul Goldenberg, and Mary Fries. The Beauty and Joy of Computing (BJC) (Week-long Workshop), New York City, NY, August 8-12, 2016.
- 227. Manuel A. Pérez-Quiñones, Jose A. Morales, and Dan Garcia. Hispanics in Computing Community (Birds of a Feather), *The Richard Tapia Celebration of Diversity in Computing Conference 2016*, Austin, TX, 2016-09-15.
- 228. Frieda McAlear, Dan Garcia, Tiffany Price, and Solomon Russell. Engaging Students of Color in Computer Science (Panel), *The Richard Tapia Celebration of Diversity in Computing Conf.*, Austin, TX, 2016-09-15.
- 229. Dan Garcia. Bringing HPC Big Ideas to high school students and learners worldwide (Online Presentation), ACM SIGHPC Education chapter webinar, Berkeley, CA, 2016-11-01.
- 230. Daniel D. Garcia. GamesCrafters (All-day workshop). CS Education Day @ Cal, Berkeley CA, 2016-12-06.
- 231. Dan Garcia, Ilya Hicks. Effective Teaching (Panel) *Academic Career Workshop for Underrepresented Junior Faculty and Senior Graduate Students*, Houston, TX, 2015-04-07.
- 232. Daniel D. Garcia, Brian Harvey, Tiffany Barnes, June Mark, Paul Goldenberg, and Mary Fries. The Beauty and Joy of Computing (BJC) (Half-week-long Workshop), New York City, NY, April 11-13, 2017.
- 233. Daniel D. Garcia. Bringing "Trustworthy Network Big Data" ideas to High School Students (Keynote), ACM Turing 50th Celebration Conference China (TUR-C), Chengdu, China, 2017-05-13.
- 234.Amber Settle, Bobby Schnabel, Dan Garcia, Dan Feng, Hong Gao, Bo Yang and Ming Zhang. Women in Academic Society (Panel), *ACM Turing 50th Celebration Conference China (TUR-C)*, Chengdu, China, 2017-05-13.
- 235. Amber Settle, Dan Garcia, Mark Guzdial, Xinbing Wang, Bo Yang, Xi Wu and Ming Zhang. Research on Computer Education (Panel), *ACM Turing 50th Celebration Conference China (TUR-C)*, Chengdu, China, 2017-05-13.
- 236. Dave Wolber, Cynthia Solomon, Dan Garcia, Illah Nourbakhsh. Future Ready Education: Approaches to Teaching CS: A discussion about different ways to expose students to concepts of CS (Panel), *InfoSys Crossroads Conference*, San Francisco, CA, 2017-05-24.

- 237. Daniel D. Garcia. The Snap! programming language used in The Beauty and Joy of Computing (BJC) (one-hour Workshop), AP CS Principles Reading "Language Night", Kansas City, MO, 2017-06-15.
- 238. Dan Garcia; Bernat Romagosa; Jens Mönig; Michael Ball; Brian Harvey. Programming the Internet (of things) with Snap! (Short Demo), *Scratch Conference 2017*, Bordeaux, France, 2017-07-19.
- 239. Dan Garcia and Jens Mönig. The World's Fastest Fractal Drawing Program (Short Talk), *Scratch Conference* 2017, Bordeaux, France, 2017-07-19.
- 240. Michael Ball; Dan Garcia; Lauren Mock. Writing Autograders for Snap! and Integrating them Into Your Course (Short Talk), *Scratch Conference 2017*, Bordeaux, France, 2017-07-20.
- 241. Dan Garcia; Brian Harvey; Jens Mönig; Michael Ball; Lauren Mock; Robert Low; Bernat Romagosa. The Beauty and Joy of Computing and the Snap! Programming Language (Poster), *Scratch Conference 2017*, Bordeaux, France, 2017-07-20.
- 242.Michael Ball; Dan Garcia; Lauren Mock. Early Analysis of "In-Lab" Autograding for Snap! (Poster), *Scratch Conference 2017*, Bordeaux, France, 2017-07-20.
- 243. Lauren Mock; Michael Ball; Dan Garcia; Brian Harvey. Lessons Learned Delivering a Customizable Course with Autograders to 200 Teachers (Ignite Talk), *Scratch Conference 2017*, Bordeaux, France, 2017-07-20.
- 244. Dan Garcia; Brian Harvey; Jens Mönig; Michael Ball; Bernat Romagosa; Robert Low; Lauren Mock. The Beauty and Joy of Computing (Workshop), *Scratch Conference 2017*, Bordeaux, France, 2017-07-21.
- 245. Daniel D. Garcia. The Beauty and Joy of Computing (BJC) (Week-long Workshop), New York City, NY, July 31 August 4, 2017.
- 246. Daniel D. Garcia, Brian Harvey, June Mark, Paul Goldenberg, and Mary Fries. The Beauty and Joy of Computing (BJC) (Half-week-long Workshop), New York City, NY, August 7-11, 2017.
- 247. Dan Garcia, Jens Mönig, and Christiane Bauer. Snap!, The Beauty and Joy of Computing and SAP Young Thinkers (Keynote), *SAP Academic Conference EMEA 2017*, Karlsruhe, Germany, 2017-09-11.
- 248. Manuel A. Pérez-Quiñones, Jose A. Morales, and Dan Garcia. Hispanics in Computing Community (Birds of a Feather), *The Richard Tapia Celebration of Diversity in Computing Conference 2017*, Atlanta GA, 2017-09-21.
- 249. Daniel D. Garcia. GamesCrafters (All-day workshop). CS Education Day @ Cal, Berkeley CA, 2017-12-05.
- 250.Dan Garcia, Lewis Feldman, and Laura Stoker. Preparing Future Faculty: Teaching a Large Lecture Course (panel). *UC Berkeley GSI Teaching and Resource Center Spring Series*, Berkeley, CA, 2018-04-11.
- 251. Daniel D. Garcia. Transforming K-12 Computer Science across the US: The Beauty and Joy of Computing (BJC) (Keynote), *Wisconsin Mathematics Council Computer Science Educators Summit*, Green Lake, WI, 2018-05-02.
- 252. Daniel D. Garcia. Transforming K-12 Computer Science: The Beauty and Joy of Computing (BJC) (Workshop), *Wisconsin Mathematics Council Summit*, Green Lake, WI, 2018-05-02.
- 253. Daniel D. Garcia. The World's Fastest Fractal (Ignite Talk), *Wisconsin Mathematics Council Summit*, Green Lake, WI, 2018-05-02.
- 254. Daniel D. Garcia. The Beauty and Joy of Computing (BJC): The Power of Functions as Data (Keynote), *Wisconsin Mathematics Council Summit*, Green Lake, WI, 2018-05-03.
- 255. Dan Garcia (Moderator), Owen Astrachan, Adrienne Decker, Helen Hu. The 8th Big Idea (Panel), *InfoSys Crossroads Conference*, Scotts Valley, CA, 2018-05-23.
- 256. Daniel D. Garcia. The Snap! programming language used in The Beauty and Joy of Computing (BJC) (one-hour Workshop), AP CS Principles Reading "Language Night", Kansas City, MO, 2018-06-14.
- 257. Daniel D. Garcia. Achieving CSforALL through the Beauty and Joy of Computing (BJC) (Keynote), *Future of Computing Education Summit (FCES) 2018*, Nanjing, CHINA, 2018-07-20.
- 258.Ming Zhang (moderator), Daniel D. Garcia, John Impagliazzo, Chen Wenguang, Li Wenxin, and Li Ru. How Education and Research help enhance the competitiveness of teachers (Panel), *Future of Computer Education Summit (FCES) 2018*, Nanjing, CHINA, 2018-07-20.
- 259. Daniel D. Garcia. Computational Game Theory (8-day Workshop) *Peking University Summer School International 2018*, Beijing, CHINA, 2018-07-30 2018-08-03.
- 260. Daniel D. Garcia. Twenty-two time-tested, three-word teaching tips (Keynote), *iGSI Teaching Conference*, UC Berkeley, Berkeley, CA, 2018-08-16.
- 261. Daniel D. Garcia. Developing Your Teaching Philosophy (Keynote), *NEXTPROF NEXUS 2018*, UC Berkeley, Berkeley, CA, 2018-09-13.

- 262. Manuel A. Pérez-Quiñones and Dan Garcia. Hispanics in Computing Community (Birds of a Feather), *The Richard Tapia Celebration of Diversity in Computing Conference 2018*, Orlando FL, 2018-09-20.
- 263. Daniel D. Garcia. Achieving CSforALL through the Beauty and Joy of Computing (BJC) (Keynote), *Global Programmer's Festival*, Xian, CHINA, 2018-10-24.
- 264.Colleen M. Lewis, Daniel D. Garcia, Helen H. Hu, Saber Khan, Nigamanth Sridhar, Bryan Twarek, and Chinma Uche. 2019. Microteaching: Recursion, Coding Style, Creative Coding, Inheritance and Polymorphism, Loops, and the Internet (Panel). In *Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE '19)*. Association for Computing Machinery, New York, NY, USA, 962–963. DOI:https://doi.org/10.1145/3287324.3287514
- 265.Crystal Furman, Owen Astrachan, Daniel D. Garcia, David Musicant, and Jennifer Rosato. 2019. CS Principles Higher Education Pathways (Panel). In *Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE '19)*. Association for Computing Machinery, New York, NY, USA, 498–499. DOI:https://doi.org/10.1145/3287324.3287342
- 266.Leigh Ann Delyser, Victoria Eisele, Daniel D. Garcia, and Henry M. Walker. 2019. SIGCSE@50: CS0 (Panel). In Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE '19). Association for Computing Machinery, New York, NY, USA.
- 267. Maritza Johnson, Daniel D. Garcia, Julia Bernd, Serge Egelman, and Buffie Holley. 2019. Teaching Cybersecurity in CSP (or Any CS Class): Introducing the Security Mindset (Pre-Symposium Workshop). In *Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE '19)*. Association for Computing Machinery, New York, NY, USA.
- 268. Lauren Mock, Michael Ball, Daniel D. Garcia, and Tiffany Barnes. 2019. Computer Science Principles Providers and Teachers Forum (Pre-Symposium Workshop). In *Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE '19)*. Association for Computing Machinery, New York, NY, USA.
- 269. Vanessa Diaz, Ko Costarella, William Gale, and Daniel D. Garcia. Careers in Computer Science (Panel). *TEALS Bay Area CS Fair*, South San Francisco, CA, USA, 2019-03-07.
- 270. Daniel D. Garcia. Achieving CSforALL through the Beauty and Joy of Computing (BJC) (Keynote). *CCSC-SW*, Stanford, CA, USA, 2019-03-22.
- 271. Daniel D. Garcia. Achieving CSforALL through the Beauty and Joy of Computing (BJC) (Keynote). *International Workshop on Computer Science Education (IWCSE 2019)*, Changsha, CHINA, 2019-05-12.
- 272. Daniel D. Garcia, Brett Becker, Andrew Luxton-Reilly, Ming Zhang, Juan Chen, and Steve Cooper. Combination of Academic Research and Computer Science Education (Panel). *International Workshop on Computer Science Education (IWCSE 2019)*, Changsha, CHINA, 2019-05-12.
- 273. Daniel D. Garcia, Tian Song, Ming Zhang, Xiao Xiao, Andrew Luxton-Reilly, and Steve Cooper. MOOC and Big Data Education (Panel). *International Workshop on Computer Science Education (IWCSE 2019)*, Changsha, CHINA, 2019-05-12.
- 274. Daniel D. Garcia, Jeanine Cook, and Jeff Forbes. Effective Teaching Learning, Mentoring, and Curriculum Development (Panel), *Academic Career Workshop for Underrepresented Junior Faculty and Senior Graduate Students*, Houston, TX, 2019-05-17.
- 275. Daniel D. Garcia. Achieving CSforALL through the Beauty and Joy of Computing (BJC) (Keynote). *WeTeach CS Annual Summit*, Georgetown, TX, USA, 2019-06-17.
- 276.Kristin Stephens-Martinez and Daniel D. Garcia. Exam Creation (Podcast). *Computer Science Education Podcast*, 2019-06-17. https://sites.duke.edu/csedpodcast/page/2/
- 277. Daniel D. Garcia and Lauren Mock. CSTA 2019 Bay Area Summit @ Cal (All-Day Professional Development Workshop, Conference Organizing), CS4HS @ Cal 2019, Berkeley, CA, 2019-06-21.
- 278. Daniel D. Garcia, Madhavan Mukund, H V Sahasrabudhe, and Dr Anand Deshpande. What is the relevant form and content of CS today? (Panel) *Persistent Systems CS Education Seminar Series*, Pune, INDIA, 2019-07-29.
- 279. Daniel D. Garcia. Achieving CSforALL through the Beauty and Joy of Computing (BJC) (ACM Distinguished Speaker Invited Talk). *Persistent Systems CS Education Seminar Series*, Pune, INDIA, 2019-08-01.
- 280. Daniel D. Garcia, Aayush Shah, Devyanshi Agarwal, Priyans Desai, Amol Palshikar, Girish Mujumdar, Vipul Shah, and Sonia Garcha. Beauty and Joy of Computing India PD (Week-long Professional Development Workshop, Organizing), *BJC India PD 2019*, Pune, 2019-07-29 to 2019-08-02.

- 281. Daniel D. Garcia. Changing Business Management to a Digital Culture (Keynote). Fórum Internacional de Innovación, Tecnología, Logística y Cadena de Suministro (XXIV EXPOGESTIÓN 2019), Lima, PERU, 2019-08-21.
- 282. Daniel D. Garcia. Achieving CSforALL through the Beauty and Joy of Computing (BJC) (Keynote). *TECHSUYO* 2019, Berkeley, CA, 2019-09-13.
- 283. Daniel D. Garcia, Christine Alvarado, and Jeff Forbes. Love Teaching? Consider a Teaching-Track career! (Panel), *The Richard Tapia Celebration of Diversity in Computing Conference 2019*, San Diego CA, 2019-09-20
- 284. Daniel D. Garcia. Achieving CSforALL with the Beauty and Joy of Computing (BJC) (Keynote). *Snap!Con 2019*, Heidelberg, GERMANY, 2019-09-23.
- 285. Daniel D. Garcia. The Beauty and Joy of Computing Middle School Curriculum (Workshop). *Snap!Con 2019*, Heidelberg, GERMANY, 2019-09-23.
- 286. Daniel D. Garcia. Mandelbrot Set (Talk). Snap!Con 2019, Heidelberg, GERMANY, 2019-09-23.
- 287. Daniel D. Garcia. The Beauty and Joy of Computing (Workshop). *SAP Young Thinkers Go Digital Night*, Heidelberg, GERMANY, 2019-09-23.
- 288. Daniel D. Garcia. Achieving CSforALL with the Beauty and Joy of Computing (BJC) (Talk). *The Nueva School Innovative Learning Conference 2019*, San Mateo, CA, USA, 2019-10-18.
- 289. Daniel D. Garcia. Achieving CSforALL with the Beauty and Joy of Computing (BJC) (Talk). *University of Pennsylvania CIS Seminar*, Philadelphia, PA, USA, 2019-11-07.
- 290. Daniel D. Garcia. Achieving CSforALL with the Beauty and Joy of Computing (BJC) (Talk). *UTK STEM Summit,* Online, 2019-11-29.
- 291. Daniel D. Garcia. The Beauty and Joy of Computing (BJC) Middle School Curriculum (Workshop). *CSinSF February Gathering*, San Francisco, CA, USA, 2020-02-04.
- 292. Daniel D. Garcia. Achieving CSforALL with the Beauty and Joy of Computing (BJC) (Keynote). *UTK United Technologies for Kids and Invent Berkeley Peruvian Student Conference*, Berkeley, CA, USA, 2020-02-18.
- 293.Renaldo Williams and Dan Garcia. 2020. CodeKey An Online Code Editor to Study Code Patterns and Enhance Student Performance in CS Courses (Poster). In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20)*. Association for Computing Machinery, New York, NY, USA, 1357. DOI:https://doi.org/10.1145/3328778.3372680
- 294. Dan Garcia, Moses Charikar, Eboney Hearn, Ed Lazowska, and Jonathan Reynolds. 2020. Institutions Share Successes, Failures, and Advice in Moving the Diversity Needle (Panel). In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20)*. Association for Computing Machinery, New York, NY, USA, 331–332. DOI:https://doi.org/10.1145/3328778.3366976
- 295.Ursula Wolz, Gail Carmichael, Dan Garcia, Bonnie MacKellar, and Nanette Veilleux. 2020. To Grade or Not To Grade (Panel). In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20)*. Association for Computing Machinery, New York, NY, USA, 479–480. DOI:https://doi.org/10.1145/3328778.3366978
- 296. Dan Garcia, Jim Huggins, Kevin Lin, Raja Sooriamurthi, Leo Ureel, and Ursula Wolz. 2020. It Seemed Like a Good Idea at the Time (Hindsight is 2020) (Panel). In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20)*. Association for Computing Machinery, New York, NY, USA, 637–638. DOI:https://doi.org/10.1145/3328778.3366974
- 297.Dan Garcia. 2020. The World's Fastest Fractal Drawing Program! (Lightning Talk) In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20)*. Association for Computing Machinery, New York, NY, USA, 1416. DOI:https://doi.org/10.1145/3328778.3372572
- 298. Dan Garcia and Michael Ball. 2020. Snap! v5, Our Biggest, Feature-filled Release Ever! (Demo) In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20*). Association for Computing Machinery, New York, NY, USA, 1417. DOI:https://doi.org/10.1145/3328778.3372549
- 299. Dan Garcia, Buffie Holley, Julia Bernd, and Maritza Johnson. 2020. Teaching Cybersecurity in CSP (or Any CS Class): Introducing the Security Mindset (Workshop). In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20)*. Association for Computing Machinery, New York, NY, USA, 1393. DOI:https://doi.org/10.1145/3328778.3367028

- 300.Michael Ball, Lauren Mock, Dan Garcia, Tiffany Barnes, Marnie Hill, Alexandra Milliken, Joshua Paley, Efrain Lopez, and Jason Bohrer. 2020. The Beauty and Joy of Computing Curriculum and Teacher Professional Development (Workshop). In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20)*. Association for Computing Machinery, New York, NY, USA, 1398. DOI:https://doi.org/10.1145/3328778.3367029
- 301.Mansi Shah and Daniel D. Garcia. 2020. Evaluating the Impact of Adaptive Parsons Problems on Students in Introductory Computer Science Courses (Poster). In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20)*. Association for Computing Machinery, New York, NY, USA, 1347. DOI:https://doi.org/10.1145/3328778.3372640
- 302. Daniel D. Garcia. Achieving CSforALL with the Beauty and Joy of Computing (BJC) (Talk). *UC Berkeley SESAME Colloquium*, Online, 2020-03-16.
- 303. Daniel D. Garcia. Best Practices in Teaching Computer Science (Talk). *University of Nebraska at Omaha Colloquium on Teaching*, Online, 2020-03-31.
- 304. Michael Ball and Daniel D. Garcia. Online Learning (Talk). *University of Washington CS Education Seminar*, Online, 2020-05-28.
- 305. Michael Ball and Daniel D. Garcia. Mastery Learning at Scale (Talk). *University of Washington CS Education Seminar*, Online, 2020-06-04.
- 306. Daniel D. Garcia. Design unique pictures with Big Pixels in Snap! (Workshop). SAP Young Thinkers Learning Festival 2020, Online, 2020-07-28.
- 307. Daniel D. Garcia. Limiting Drops for Conflicting Types in Snap! for Young Learners (or: How I learned to Stop Worrying and Love the Feature) (Short Talk). *Snap!Con 2020*, Online, 2020-07-31.
- 308. Maxson Yang, Gurkaran Singh Goindi, Penguinlay, Benjamin Belfus, Shannon Hearn, Jonas Ong, Qitian Liao, Alyssa Sugarman, Dan Garcia, Bojin Yao, Eduardo Huerta, Irene Ortega. Computer-Based Testing (Posters and Demos). *Snap!Con 2020*, Online, 2020-07-31.
- 309. Maxson Yang, Gurkaran Singh Goindi, Penguinlay, Benjamin Belfus, Shannon Hearn, Jonas Ong, Qitian Liao, Alyssa Sugarman, Dan Garcia, Bojin Yao, Eduardo Huerta, Irene Ortega. Computer-Based Testing (Panel). *Snap!Con 2020*, Online, 2020-08-01.
- 310. Daniel D. Garcia. BJC Middle School, Year 2 (Workshop). Snap!Con 2020, Online, 2020-08-02.
- 311. Daniel D. Garcia. Middle School Curriculum (Birds of a Feather). Snap!Con 2020, Online, 2020-08-02.
- 312. Daniel D. Garcia. Snap! in the High School Classroom (Birds of a Feather). *Snap!Con 2020*, Online, 2020-08-02.
- 313. Katrina LaCurts, Torsten Braun, Florian Tschorsch, and Daniel D. Garcia. Pedagogy: techniques and tips. Experiences Moving Online with a Big and Small Class Spring 2020 (Panel). 2020 ACM SIGCOMM Education Workshop and Community Discussion, Online, 2020-08-06.
- 314. Daniel D. Garcia. Achieving CSforALL with the Beauty and Joy of Computing (BJC) (Keynote). *LWMOOCS VII Learning with MOOCS 2020*, Online, 2020-10-01.
- 315. Daniel D. Garcia. Parallel and Distributed Computing Infusion in K-14 (Keynote). *EDUHPC-20*, Online, 2020-11-13.
- 316. Dan Garcia, Ivona Bezakova, Adam Blank, and Neal Terrell. 2021. Teaching Computer Science with Abstract Strategy Games (Panel). In *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*. Association for Computing Machinery, New York, NY, USA, 1232–1233. DOI:https://doi.org/10.1145/3408877.3432572
- 317. Dan Garcia, Tiffany Barnes, Art Lopez, Chinma Uche, and Jill Westerlund. 2021. Technology We Can't Live Without!, Revisited. (Panel) In *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*. Association for Computing Machinery, New York, NY, USA, 138–139. DOI:https://doi.org/10.1145/3408877.3432571
- 318.Dan Garcia and Michael Ball. 2021. Snap! 6, Introducing Hyperblocks! (Demo) In *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*. Association for Computing Machinery, New York, NY, USA, 1379. DOI:https://doi.org/10.1145/3408877.3439545
- 319. Dan Garcia. 2021. The Big Pixel Microworld. (Lightning Talk) In *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*. Association for Computing Machinery, New York, NY, USA, 1371. DOI:https://doi.org/10.1145/3408877.3439561

- 320. Justin Hsia, Dan Garcia, and Swapneel Sheth. 2021. Student Teachers as Lead University Instructors (Birds of a Feather). In *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*. Association for Computing Machinery, New York, NY, USA, 1360. DOI:https://doi.org/10.1145/3408877.3439520
- 321.Michael Ball, Dan Garcia, and Eric Arvai. 2021. Effective Video Production for Online and In-Person Courses (Workshop). In *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*. Association for Computing Machinery, New York, NY, USA, 1349. DOI:https://doi.org/10.1145/3408877.3432509
- 322.Marnie Hill, Dan Garcia, Tiffany Barnes, Lauren Mock, Michael Ball, Amy Isvik, and Dave Bell. 2021.

 Teaching with the Beauty and Joy of Computing AP CSP and More! (Workshop) In *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*. Association for Computing Machinery, New York, NY, USA, 1352. DOI:https://doi.org/10.1145/3408877.3432507
- 323. Daniel D. Garcia, Michael P. Rogers, and Andreas Stefik. 2021. Fun and Engaging Pre-CS1 Programming Languages (Panel). In *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*. Association for Computing Machinery, New York, NY, USA, 760–761. DOI:https://doi.org/10.1145/3408877.3432570
- 324.Bojin Yao, Qitian Liao, Connor McMahon, and Daniel D. Garcia. 2021. Formal Categorization of Variants for Question Generators in Computer-Based Assessments (Poster). In *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*. Association for Computing Machinery, New York, NY, USA, 1244. DOI:https://doi.org/10.1145/3408877.3439683
- 325.Alexander C. Kafka, Daniel D. Garcia, Fred H. Cate, Ashok Goel, Marsha Lovett, and Morris Thomas. Al's impact on Teaching (Panel). *The Chronicle of Higher Education Virtual Panel*, Online, 2021-03-17.
- 326. Daniel D. Garcia. Achieving CSforALL with the Beauty and Joy of Computing (BJC) (Talk). *UNC Charlotte Spring 2021 Research Seminar Series*, Online, 2021-03-26.
- 327. Daniel D. Garcia. What is a "Core", anyway? (Archived Video Lecture). *College Board AP CS Principles Daily Lecture Series*, Online, 2021-03-29.
- 328. Daniel D. Garcia. Great Ideas in Computer Science, aka The Beauty and Joy of Computing (BJC) (Keynote). *University of Rhode Island Explore Computer Science Research Workshop, aka URI ExploreCSR 2021*, Online, 2021-04-08.
- 329. Daniel D. Garcia. The Beauty and Joy of Binary Numbers (Talk). *UC Berkeley bridges Multicultural Resource Center Mock Lecture*, Online, 2021-04-20.
- 330. Daniel D. Garcia, Christine Alvarado, and Rob Parke. Effective Teaching Learning, Mentoring, and Curriculum Development (Panel), *Academic Career Workshop for Underrepresented Junior Faculty and Senior Graduate Students*, Online, 2021-06-14.

GRANTS AND GIFTS AWARDED

- 1. UCB Course Improvement Grant, CS301 (2001), A half-semester TA, Dan Garcia PI
 Together with TA Andrew Begel, created lecture notes, online roster, videotaping, cgi-bin programs which allowed for automatic, online journal entry & editing for teaching reflection.
- UCB Committee on Teaching Instructional Minigrant (2004), \$500, Dan Garcia PI
 Purchased royalty-free music & sound effects (on CD-ROM and DVD-ROM) for computer graphics and animation pieces.
- 3. **HP Technology-for-Teaching Initiative (2004), \$17,500** and **\$53,000** equipment, Dan Garcia PI Designed CS4 (*Intro to computing for engineers*) around a 20-laptop "HP mobile lab". Created a novel lab space with small tables for 6-8 students to sit together and work on a problem concurrently, pair programming, in Java.
- 4. UCB Townsend for the Humanities GROUP Award (2006), \$5,000, Dan Garcia & Greg Niemeyer co-Pls Together with Art Professor Greg Niemeyer and Pixar, designed novel "CNM190: Advanced Digital Animation" course.
- 5. UCB Committee on Teaching Instructional Minigrant (2008), \$3,600, Dan Garcia PI Funding to support "Computer Science Illustrated" project; labor and materials.

6. Bears Breaking Boundaries Contest Curricular Innovation (2009), \$1,000, Dan Garcia & Brian Harvey co-

Funding to support "CS10: The Beauty and Joy of Computing" course development.

- 7. Lockheed Martin Curricular Innovation (2009), \$50,000, Dan Garcia & Brian Harvey co-Pls Funding to support *CS10: The Beauty and Joy of Computing* course development.
- 8. Apple, Inc. (2009), \$150,000 equipment, Dan Garcia PI
 Donation of 30 Mac Pro workstations + displays for EECS / CITRIS.
- 9. Intel (2009), \$12,000, Dan Garcia PI
 Funding to support student development of an animation of their Routebricks™ project for their open
- 10. CollegeBoard (Advanced Placement National Pilot, Phase I) (2010), \$35,000, Dan Garcia Pl
 Funding to support CS10: The Beauty and Joy of Computing course development and High School teacher
 outreach
- 11. Google CS4HS (2010), \$20,000, Dan Garcia PI

Funding to support "CS4HS Workshop", a 2-day High School teacher outreach and professional development workshop.

- 12. Google CS4HS (2011), \$15,000, Dan Garcia PI Funding to support "CS4HS Workshop", a 2-day High School teacher outreach and professional development workshop.
- 13. University of California (2011), \$70,000, Dan Garcia PI, Brian Harvey co-PI
 Funding to develop innovative *CSW10: The Beauty and Joy of Computing (BJC)*, the online companion to our CS10 class.
- 14. NSF CE21: FRABJOUS CS Framing a Rigorous Approach to Beauty and Joy for Outreach to Underrepresented Students in Computing at Scale (2011), \$1,000,000, Dan Garcia PI, Tiffany Barnes PI, Brian Harvey co-PI
 - (1138596) Funding to support Professional Development activities for 100 high school teachers nationwide to learn BJC.
- 15. NSF CE21: Advanced Placement Computer Science: Principles Summer 2011 Professional Development for UC Berkeley Cluster of High School Teachers (2011), \$220,430, Dan Garcia PI, Brian Harvey co-PI (1143566) Funding to support PD activities for UC Berkeley cluster of high school teachers to learn BJC.
- 16. Google CS4HS (2012), \$13,000, Dan Garcia PI Funding to support "CS4HS Workshop", a 2-day High School teacher outreach and professional development workshop.
- 17. NSF RAPID: Facilitating a CS-10K Community of Practice Testbed (2013), \$200,000, Dan Garcia PI (1250783) Funding to support CE21 PD facilitators to build and staff online community of practice.
- 18. Google CS4HS (2013), \$13,000, Dan Garcia PI Funding to support "CS4HS Workshop", a 2-day High School teacher outreach and professional development workshop.
- 19. NSF CE21: FRABJOUS CS Framing a Rigorous Approach to Beauty and Joy for Outreach to Underrepresented Students in Computing at Scale (2014), \$113,450 supplement, Dan Garcia PI (1443699) Funding to support Professional Development activities for 90 high school teachers nationwide to learn BJC.
- 20. Google (2014), \$13,000, Dan Garcia PI

Funding to support "CS4HS Workshop", a 2-day High School teacher outreach and professional development workshop.

21. NSF CE21: Principled Assessment of Computational Thinking (PACT) (2012), \$690,538, Dan Garcia Consultant

Funding for SRI International (SRI) to design, develop, and validate assessments of computational thinking (CT) for the high school Exploring Computer Science (ECS) curriculum. My role was to serve as an educational consultant on the advisory board.

22. NSF CER: Import PCK: What 10K Novice Teachers Can Learn from Teachers with 10K Hours of Experience (2013), \$771,095, Dan Garcia Consultant

Funding for Harvey Mudd College to document, validate, and promote CS pedagogical content knowledge. My role was to serve as an educational consultant on their advisory board.

- 23. NSF BP: The Development, Implementation, and Evaluation of an AP Computer Science Preparatory Sequence for Underrepresented High School Students (2013), \$633,161, Dan Garcia Consultant Funding for Level Playing Field Institute to design and implement a comprehensive Advanced Placement computer science preparatory course sequence within its 3-year Summer Math and Science Honors Academy (SMASH) to prepare underrepresented high school students of color to pursue computer science degrees in higher education. My role was to serve as an educational consultant on the advisory board.
- 24. NSF Computer Science in Secondary Schools (CS3): Studying Context, Enactment, and Impact (2014), \$3,128,654, Dan Garcia Consultant

Funding for SRI International (SRI) to work in partnership with the ECS curriculum developers, teachers, and the nonprofit Code.org who are involved in the scaling of ECS. Study how variation in curricular implementation influences student learning and determines not only what works, but also for whom and under what circumstances. My role was to serve as an educational consultant on the advisory board.

25. NSF STEM-CP BJC4NYC: Bringing the Beauty and Joy of Computing to the Largest School System in the US. (2014), \$7,874,876, Dan Garcia Senior Personnel

Funding to develop curricular materials, based on the Beauty and Joy of Computing, for teaching CS Principles at the high school level using the Snap! programming language. Run in-person teacher-training programs each summer, and develop an online teacher development course. During the project, 100 high school teachers in New York City will be trained to teach this course, and early participants will also become teacher-trainers who will work with later participants. The teachers involved will become part of a Community of Practice that will continue to provide support for the teacher cohorts. My role was to (1) conduct summer professional development workshops; work w/EDC curriculum & Snap! software developers to review and suggest changes, (2) develop BJCx (with auto-grading features) for teachers as a small private online course (SPOC), (3) support BJC teachers online, and (4) serve as the liaison with the College Board as a member of the AP Computer Science Development Committee.

26. NSF EDU: Teachers' Resources for Online Privacy Education (TROPE) (2014), \$319,962, Dan Garcia Senior Personnel

Funding for ICSI to develop a Teacher's Kit that supports high school educators and undergraduate instructors in teaching fundamental principles and best practices for online behavior to protect privacy. My role was to collaboratively develop these materials.

- 27. edX (2014), \$50,000, Dan Garcia PI
 - Funding to support the development of BJCx, a year-long high school AP CS Principles course based on my UC Berkeley Beauty and Joy of Computing course.
- 28. Google's 3X in 3 Years (2015), \$900,000, Dan Garcia grant co-author

Funding to the department for 3-year project to grow undergraduate capacity and support diversity via our "Scaling Computer Science through Targeted Engagement" project. The three objectives are (1) Decrease the intro GPA gap between experienced and inexperienced students by 50%, (2) Increase *Software Engineering* and *UI Design* enrollment by 500 total students/year, and (3) Increase the number of women and underrepresented minority CS majors by a factor of 3.

- 29. Google CS4HS (2016), \$34,460, Dan Garcia PI
 - Funding to support "CSP4SFBayArea (aka CS4HS) Workshop", a 2-day High School teacher outreach and professional development workshop.
- 30. NSF RAPID SInRGI: A Shared, Integrated Resource for "Global Impact" (2016), \$200,000, Dan Garcia Senior Personnel

Curate and develop teaching resources for AP Computer Science Principle's "Global Impact" learning objectives. My role: Co-author proposal, and as representative for the Beauty and Joy of Computing (BJC), highlight resources for Global Impact Big Idea – contribute materials, and work together with representatives from other curriculum providers to identify the best combination of approaches, and to create any new materials that are needed to fill gaps.

- 31. **NSF RAPID:** Teaching Security in CSP (2016), \$200,000, Dan Garcia Senior Personnel
 Develop security-related education materials for the community that is developing around the AP
 Computer Science Principles (CSP) course. My role: Co-author proposal, and co-develop resources that can
 be re-used by any provider offering the AP CS Principles curriculum.
- 32. Hopper-Dean Foundation Computer Science Diversity Programs Fund (2016), \$200,000, Dan Garcia PI
 The foundation granted \$1M to the department to fund diversity initiatives; my \$200k was used to support our online course BJCx, develop auto-grading exercises, software development and TA staff.
- 33. NSF ENGAGE: A Game-based Curricular Strategy for Infusing Computational Thinking into Middle School Science (2016), \$2,498,862, Dan Garcia Consultant

 Funding for NC State to study how deep, mastery-oriented gameplay can develop core computational thinking practices in middle school life science. My role: educational consultant for their advisory board.
- 34. NSF CSforAll: EAGER: NetsBlox: Visual Programming Environment for Teaching Distributed Computing Concepts (2016), \$299,798, Dan Garcia Consultant

 Funding for Vanderbilt University to build distributed computing activities for introductory computer science using Netsblox. My role: educational consultant to help build curricular materials.
- 35. InfoSys Summer 2016 BJC PD Grant (2016), \$184,500, Dan Garcia Senior Personnel Funding to support summer professional development for teachers learning the BJC curriculum.
- 36. InfoSys Summer 2017 BJC PD Grant (2017), \$311,975, Dan Garcia Senior Personnel Funding to support summer professional development for teachers learning the BJC curriculum.
- UCB Student Technology Fund (2017), \$5,000, Dan Garcia PI
 Funding to support hardware for CS10 open-ended final projects: computer-controlled sewing machines, replacement i>clickers, Leap Motion sensors, and Finch Robots.
- 38. InfoSys Summer 2018 BJC PD Grant (2018), \$8,000, Dan Garcia Senior Personnel Funding to support summer professional development for teachers learning the BJC curriculum.
- 39. NSF EHR STEM+C, CSforALL: Building a Computational Thinking Foundation in Upper Elementary Science with Narrative-Centered Maker Environments (2019), \$1,599,339, Dan Garcia Consultant Funding to support design, development, and investigation of InfuseCS, aninteractive learning environment for computational thinking that features maker-based digital storytelling and problem-based learning.
- 40. NSF ITEST, Beyond CS Principles: Engaging Female High School Students in New Frontiers (2019), \$595,380,

 Dan Garcia Consultant
 - Funding to support design, development, and investigation of Cybersecurity, Internet-of-Things, and Machine Learning curriculum modules based on NetsBlox, an extension of the Snap! language.
- 41. Hopper-Dean Foundation, Accelerating CS Diversity Programs Fund (2019), \$600,000, Dan Garcia PI
 The foundation granted \$3M to the department to fund diversity initiatives; my \$600k was used to support our middle school curriculum, Spanish translation, software development and staff.
- 42. UC Berkeley College of Engineering, Course Adaptation and Remote Delivery, Learning, and Assessment: Developing Question Generators and MOOC-like videos+quizzes for remote CS61C, CS10, and CS169A (2020), \$60,000, Dan Garcia co-PI
 - Funding to build Question Generators and MOOC-like videos and quizzes for CS61C and CS10 for remote delivery, learning, and assessment.
- 43. California Governor's Office of Planning and Research, Reorienting Formative and Summative Assessment Towards Mastery Learning for Learner Success, Student Equity, and Institutional Resilience (2020), \$650,000, Dan Garcia co-PI
 - Funding to adapt and adopt the University Illinois at Urbana-Champaign's PrairieLearn platform for mastery learning in computer-based assessments, and study impact. UCB Award ID: 049488-001
- 44. **NSF EAGER, Student Mission Control for the International Space Station (2021), \$298,944, Dan Garcia co-PI**Funding to support development of an API, website, "Student Mission Control" interface, and curriculum modules centered on the data streaming out of the International Space Station. NSF Award #2027260
- 45. Apple Inc., Export of CS61C for HBCUs (2021), \$50,000, Dan Garcia co-PI Funding to support the "packaging" of CS61C for export and adoption by faculty at Historically Black Colleges and Universities (HBCUs), including a bootcamp for HBCU instructors.

REFERENCES

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