

# DANIEL D. GARCIA

ddgarcia@cs.berkeley.edu  
http://www.cs.berkeley.edu/~ddgarcia/

777 Soda Hall #1776  
UC Berkeley  
Berkeley, CA 94720-1776  
(510) 517-4041

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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.** Specialization: computer graphics and scientific visualization. Brian Barsky, advisor.

## 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 Information Technology Faculty Award for Excellence in Undergraduate Teaching (2005)
- UC Berkeley “Everyday Hero” Award (2005)
- Highest course “teaching effectiveness” rating of any EECS lower division instructor, ever (6.7, since tied) (2006)
- *CS10: The Beauty and Joy of Computing* chosen as one of five national pilots for the new AP CS: Principles exam (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 (in recorded history) to have > 50% women! (2013,2014)

## TEACHING INTERESTS

Core CS introductory curricula (CS10, CS61[abc]), CS teaching techniques (CS30[12]), self-paced programming classes (CS9[a-h], CS47[abc]), game theory (“GamesCrafters” CS198, Math274), computer animation (“UCBUGG” CS198, CNM190, CS39a), Macintosh software development for OS X (“MS-DOS X” 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)

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## TEACHING EXPERIENCE

LECTURER, UNIVERSITY OF CALIFORNIA, BERKELEY (Fa00-Sp03) Berkeley, CA

LECTURER PSOE, UNIVERSITY OF CALIFORNIA, BERKELEY (Fa03-Sp06) Berkeley, CA

LECTURER SOE, UNIVERSITY OF CALIFORNIA, BERKELEY (Sp06-Sp12) Berkeley, CA

SENIOR LECTURER SOE, UNIVERSITY OF CALIFORNIA, BERKELEY (Sp12-present) Berkeley, CA

Computer Science 39n/10 **The Beauty and Joy of Computing** (Fa09, Fa10, Sp11, Fa11, Sp12, Fa12, Sp13, Fa13, Sp14)

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 CollegeBoard Advanced Placement computing course “Computer Science: Principles”, and as a UC Online Instruction Pilot Project course, to be offered Fall 2012 as CSW10. In the Sp13 we achieved a historic milestone: it was the first time a UC Berkeley intro computing course had > 50% women! 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).

Computer Science 3 **Introduction to Symbolic Programming** (Fa00, Sp01, Fa01, Fa02, Sp03, Fa03, Fa08, Sp09)

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** (Fa04)

Designed and piloted entirely new course for College of Engineering with Professor Kathy Yelick (CS) & Professor 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-computer (i.e., 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** (Sp05-present, aside from Fa07 [sabbatical])

Team-taught with Lecturer 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.

Computer Science 61a **Structure and Interpretation of Computer Programs** (Sp01, Sp02)

Team-taught with Lecturer Brian Harvey (Sp01). Archived some chalkboard figures drawn during the semester to EPS graphic format for inclusion in a future reader. Ratings: 4.9 (Sp01), 5.7 (Sp02)

Computer Science 61b **Data Structures and Advanced Programming** (Fa03)

Team-taught with Professor 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 module (Domineering) for end-of-semester game project. Rating: 6.0 (Fa03)

Computer Science 61c **Machine Structures** (Fa01, Fa02, Sp04, Fa04, Sp05, Fa05, Fa06, Sp07, Sp08, Sp10)

Team-taught with David Patterson (Fa01, Fa02) and Michael Franklin (Fa11). Designed many new assignments and projects. Instituted parallelism week (lec+lab), and “just in time learning”, which involved several novel pedagogical concepts: peer instruction, reading quizzes and lecture “ConcepTests”. 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)

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### Computer Science 301 **Teaching Techniques for Computer Science** (Sp01, Sp02, Sp03)

Team-taught with Professor Brian Barsky (Sp03). Gave course much-needed face-lift with GSI Andy Begel (Sp01). Created lecture notes, online roster, videotaping, `cgi-bin` programs for automatic, online journal entry & editing for teaching reflection. Introduced faculty guest lectures. Ratings: 6.3 (Sp01), 6.5 (Sp02), 5.5 (Sp03), 5.9 (Sp08)

### Computer Science 302 **Designing Computer Science Education** (Sp10, Sp12)

Team-taught with Senior Lecturer Michael Clancy and EE lecturer Babak Ayazifar). Worked with small class (8 students) 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. Ratings: 6.6 (Sp10), 6.9 (Sp12)

### Computer Science 98/198 UC **Berkeley Undergraduate Graphics Group (UCBUGG)** (Fa01-Sp05, DeCal-run Fa05-present)

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: “Zoom into Gates Hall”, “ThePlay3D”, “Jumbotron”, “Manakin Love”, “Rube”, and “The Plagues”. 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. <http://ucbugg.berkeley.edu/>

### Computer Science 98/198 **Macintosh Student Developers for OS X (MS-DOS X)** (Fa01-Sp05, DeCal-run Fa05-present)

Founded this novel course in Fa01. Course covers Macintosh OS X and iOS programming. Several alumni work for Apple.

### Computer Science 98/198 **Undergraduate Game Theory Research (GamesCrafters)** (Fa01-present)

Founded this novel group in Fa01. Since then, supervised over 375 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 brute-force 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 had designed the game to be a draw, but is in fact a 1<sup>st</sup>-player win!

### Center for New Media 190 (cross-listed as Computer Science 194-8) **Advanced Digital Animation** (Fa06, Sp07, Fa08, Sp09, Fa10)

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)

## **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 and final projects. Won departmental Outstanding GSI award in Fa97 (*last* semester 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.

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## RESEARCH INTERESTS

### Computer Science Education

- Investigate novel techniques and applications for improving CS instruction, especially introductory courses.
- Help solve “CS10K” problem (getting 10,000 well-trained teachers prepared to teach the new AP CS: Principles exam by 2016) through innovative curriculum (our CS10 course) and professional development activities for high school teachers. This includes our course (<http://bjc.berkeley.edu>) and software (<http://snap.berkeley.edu>).
- Create the most incredible online experience for learning computing (specifically CS10), including high-definition video snippets, videos of “the teacher taking the class” for students who are stuck, and in-the-browser programming games.
- Explore the use of magic to “demystify” computing. <http://doi.acm.org/10.1145/2157136.2157164>
- Build archive of “Kinesthetic Learning Activities (KLAs)”, to tap active learning. <http://www.cs.ubc.ca/~kla/>
- Collect and share great teaching tips. <http://www.cs.berkeley.edu/~ddgarcia/teaching/tips/>
- Build Technology that Educators of Computing Hail (TECH) archive. <http://www.computingportal.org/TECH>
- Help build ENSEMBLE NDSL pathway for computing education. <http://www.computingportal.org/>
- Build system to deliver synchronized EECS lecture webcasts and notes. <http://wla.berkeley.edu/>
- Create whimsical illustrations to teach hard-to-grasp CS concepts. <http://csillustrated.berkeley.edu/>
- Infuse parallelism (Scheme MapReduce, Java MapReduce, pthreads, etc.) into introductory CS courses: <http://www.eecs.berkeley.edu/Pubs/TechRpts/2008/EECS-2008-34.html>
- Advocate for “Passion, Beauty, Joy and Awe” in our CS courses. <http://www.computingportal.org/pbja>
- Help define “computational thinking”. <http://www.computingportal.org/ComputationalThinking>

### Combinatorial and 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) was recently solved, and Quarto, Connections, Bagh Chal, Mancala/Awari, Dragons and Swans, and Toot-n-Otto are next. <http://gamescrafters.berkeley.edu/>

### Computer Graphics

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

## PROFESSIONAL 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)
- ACM Education Council, and technology and tools task force chair (2006-present)
- ACM Education Board (2007-present)
- Berkeley Foundation for Opportunities in Information Technology (BFOIT) faculty co-advisor (2007-present)
- Faculty champion for local *CSTA: Golden Gate chapter* (coordinate & present at monthly meetings) (2010-present)

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- UC Berkeley Latino/a Association of Graduate Students in Engineering and Science (*LAGSES*) faculty advisor (2010-present)
- CollegeBoard Advanced Placement *Computer Science: Principles* development committee (2013-present)
- CollegeBoard Advanced Placement *Computer Science: Principles* pilot, phase II (2013-present)
- CollegeBoard Advanced Placement *Computer Science: Principles* teaching guide author (2013-present)
- Outside reviewer for faculty promotion case at UC Santa Barbara (2013)
- Teaching Institute for Excellence in Stem (TIES) consultant for computer science STEM initiative in Egypt (2013-2014)
- SRI Principled Assessment of Computational Thinking (PACT) advisory board (2013-present)
- Technology Education And Literacy in Schools (TEALS) advisory board (2013-present)
- Level Playing Field Institute's SMASH advisory board (2014-present)
- Computer Science Pedagogical Content Knowledge (CS PCK) advisory board (2014-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, and install “clicker” devices in rooms (2003-2004)
- COE subcommittee to design & pilot new CS course (CS4) for COE common first 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)
- Letters & Science computer science group advising sessions & summer CalSO seminars (2001-present)
- EECS audio/video czar, serving as liaison from faculty to AV staff (2002-present)
- EECS Undergraduate Advising (2003-present)
- COE committee to review jr. transfer files for undergraduate admissions (2002, 2005, 2007, 2011-present)
- EECS Undergraduate Study committee (2005-2007, 2011-present)
- CS Summer Sessions Coordinator (2011-present)
- CS Education Day Faculty Co-coordinator (2011-present)
- EECS Awards committee (2012-2013)
- EECS Task Force on Structural Changes in EECS Curriculum (2012-2014)
- UC Berkeley Berkeley Resource Center for Online Education Grant Reviewer for MOOClab proposals (2013)
- UC Berkeley Faculty Advisory committee for Berkeley Resource Center for Online Education (2012-present)
- UC Berkeley STEM Curriculum Working Group (2013-present)
- UC Berkeley BioEngineering Lecturer SOE Search Committee (2013)
- UC Berkeley Computer Science Lecturer PSOE Search Committee (2013)

### **PROFESSIONAL SOCIETIES**

- International Society for Optical Engineering, SPIE (1999)
- Eta Kappa Nu Electrical Engineering Honor Society (1990-2010).  
Faculty advisor for local Mu chapter, recent winner of IEEE-HKN Outstanding Chapter Award (2010-2014).
- Association of Computer Machinery (1988-present)
- NCWIT Academic Alliance (2012-present)
- Computer Science Teachers Association (2011-present)

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### COMPUTER LANGUAGES & TOOLS

Snap!, BYOB, C, Scheme & Common Lisp, Python, 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, *bigtbing* (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, *Pbi 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

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## **PUBLICATIONS AND PRESENTATIONS**

### **Theses**

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

### **Theses Supervised**

1. Lee, Bryce. Interface Design and Implementation of a Collaborative Observatory for Natural Environments. *MS Project* (2<sup>nd</sup> reader), EECS Dept, University of California, Berkeley, May, 2008.
2. Huddleston, Jeremy. Advanced Digital Animation Curriculum Development: An Interdisciplinary Approach, *MS Thesis*, EECS Dept, University of California, Berkeley, May, 2009.
3. Yim, Ketrina. Computer Science Illustrated, *MS Project*, EECS Dept, University of California, Berkeley, May, 2009.
4. Segars, Albert Luke. REGIS: Random Exercise Generation and Inference System, *MS Project*, EECS Dept, University of California, Berkeley, May, 2012.
5. Armendariz, Dan. OCTAL: The Online Course Tool for Adaptive Learning, *MS Project*, EECS Dept, University of California, Berkeley, May, 2014.
6. Rogers, Stephanie. ACES: Automatic Evaluation of Coding Style, *MS Project*, EECS Dept, University of California, Berkeley, May, 2014.

### **Books/Book Chapters**

1. Garcia, Daniel D. Xdom: A Graphical, X-based Front-End for Domineering, *Games of No Chance*, Richard J. Nowakowski, editor. Cambridge University Press, 1996, pp. 311-313.

### **Refereed Archival Journal Pieces**

1. Barsky, Brian A.; Klein, Stanley A.; and Garcia, Daniel D. Gaussian Power with Cylinder Vector Field Representation for Corneal Topography Maps, *Optometry and Vision Science*, Vol. 74, No. 11, Nov, 1997.
2. Klein, Stanley A. and Garcia, Daniel D. Line of Sight and Alternative Representations of Aberrations of the Eye, *Journal of Refractive Surgery*, Vol. 16, Sep/Oct 2000.
3. Ginat, David; and Garcia, Daniel D. Ordering Patterns and List Inversions, *Journal of CS Education*, Nov 2003.
4. Crutchfield, Orpheus S. L.; Harrison, Christopher D.; Garcia, Daniel D.; Humpreys, Sheila M.; Lewis, Colleen M.; and Khooshabeh, Peter. 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. Snyder, Lawrence; Barnes, Tiffany; Garcia, Dan; Paul, Jody; and Beth Simon. 2012. The first five computer science principles pilots: summary and comparisons. *ACM Inroads* 3, 2 (June 2012), 54-57.

### **Refereed Conference Proceedings (Papers)**

1. Garcia, Daniel D. 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.
2. Chen, Yanpei; Fong, Patricia C.; Hong, Jerry; Mahajan, Deepa; Okita, Cynthia; Poll, David Eitan; Roytman, Alan; Sadgat, Ofer and Garcia, Daniel D. 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. Yim, Ketrina; Ahn, Sally; and Garcia, Daniel D. Computer Science Illustrated: Engaging Visual Aids for Computer Science Education (Paper) *SIGCSE 2010*, Milwaukee, WI, March 10-13, 2010.
4. Garcia, Daniel D.; Zhang, Gene; Carr, Sean; Iyengar, Sameer; Edelstein, Hava; and Liu, Albert. The Weiner Lecture Archives: An Ontology-Driven Interface for Viewing Synchronized Lectures and Notes (Paper) *SIGCSE 2010*, Milwaukee, WI, March 10-13, 2010.

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5. Fox, Ed; Chen, Yinlin; Akbar, Monika; Shaffer, Clifford; Edwards, Stephen; Brusilovsky, Peter; Garcia, Daniel D.; Delcambre, Lois; Decker, Fran; Archer, David; Furuta, Richard; Shipman, Frank; Carpenter, Stephen; and Cassel, Lillian. Ensemble PDP-8: Eight Principles for Distributed Portals (Paper), *JCDL 2010*, Surfer's Paradise, Australia, June 21-25, 2010.
6. Garcia, Daniel D.; Lewis, Colleen; Harvey, Brian; Wang, George; Chou, Stephanie; and Moenig, Jens. Scratch at the College Level: The Beauty and Joy of Computing (Paper), *Scratch@MIT*, Cambridge, MA, August 12-14, 2010.
7. Brusilovsky, Peter; Cassel, Lillian; Delcambre, Lois; Fox, Edward; Furuta, Richard; Garcia, Dan; Shipman, Frank; Yudelson, Michael; and Bogen, Paul. 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. Akbar, Monika; Fan, Weiguo; Shaffer, Clifford A.; Chen, Yinlin; Cassel, Lillian; Delcambre, Lois; Garcia, Daniel D.; Hislop, Gregory W.; Shipman, Frank; Furuta, Richard; Carpenter II, B. Stephen; Hsieh, Haowei; Siegfried, Bob; and Fox, Edward A. 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.

### Technical Reports

1. Garcia, Daniel D. SPAM: Spline-parameterized adjustable motion, In Procedural Modeling, *EECS UC Berkeley Technical Report CSD-94-860*, December 1994.
2. Zhang, Gene; Carr, Sean; Iyengar, Sameer; Edelstein, Hava; Liu, Albert and Garcia, Daniel D. The Weiner Lecture Archives : An Ontology-Driven Interface for Viewing Synchronized Lectures and Notes, *EECS UC Berkeley Tech. Rep. UCB/EECS-2007-135*, Nov. 2007.
3. Johnson, Matthew; Liao, Robert H.; Rasmussen, Alexander; Sridharan, Ramesh; Garcia, Daniel D. and Harvey, Brian. Infusing Cluster Computing into Introductory Computer Science Curriculum, *EECS UC Berkeley Tech. Rep.*, Nov. 2007.

### 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 meeting (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 UC Berkeley "Teaching, Learning and Technology" Symposium (2007)
- *DART Opportunities for CS Students* at UC Berkeley "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, and as the keynote for the Fourth Melbourne Computing Education Conventicle (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* guest 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)
- *274 Students Can't Be Wrong: GamesCrafters, a Computational Game Theory Group*, Grinnell College (2010)
- *274 Students Can't Be Wrong: GamesCrafters, a Computational Game Theory Group*, Gunn High School (2010)
- *274 Students Can't Be Wrong: GamesCrafters, a Computational Game Theory Group*, Ralph Bunche High School (2010)
- *274 Students Can't Be Wrong: GamesCrafters, a Computational Game Theory Group*, Albany High School (2010)
- *Infusing Concurrency into the Intro CS Undergraduate Curricula*, University of Puerto Rico, Rio Piedras (2010)



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- *GamesCrafters, a Computational Game Theory Group at UC Berkeley*, University of Puerto Rico, Rio Piedras (2010)
- *Keynote* for Berkeley Foundation for Opportunities in Information Technology (BFOIT) session (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 and the UC Online Instruction Pilot Project*, UC Berkeley Online Consortium (2011)
- *Twenty Top Time-Tested TA Teaching Tips* at UC Berkeley Teaching Conference for International GSIs (2008, 2012)
- *Computer Science & GamesCrafters* guest lecture in E92: Perspectives in Engineering, BFOIT (2008, 2010, 2011, 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)

### Conference and Workshop Presentations

1. 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.

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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.
26. 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.

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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, Lillian; 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 2011*, 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.

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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 Education 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*, New York, NY, July 11-13, 2011.
75. Richardson, Debra J.; Garcia, Daniel D.; Paley, Josh; Ericson, Barb; Guzdial, Mark; and Kmoch, Joseph. Computer Science 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. FRABJIOUS 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.

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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 Dynamics 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 PI 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 PI 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.

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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; Hoepfner, 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.

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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, 2013.
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.

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### GRANTS 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.
2. **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-PIs**  
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-PIs**  
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-PIs**  
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 house.
10. **CollegeBoard (Advanced Placement National Pilot, Phase I) (2010), \$35,000, Dan Garcia PI**  
Funding to support *CS10: The Beauty and Joy of Computing* course development and High School teacher outreach.
11. **Google (2010), \$20,000, Dan Garcia PI**  
Funding to support "CS4HS Workshop", a 2-day High School teacher outreach and professional development workshop.
12. **Google (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 Under-represented 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 (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 (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 Under-represented 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.



## Daniel D. Garcia

### REFERENCES

Senior Lecturer SOE Emeritus Michael Clancy  
clancy@cs.berkeley.edu  
(510) 642-7017

Professor David Patterson  
pattsrn@cs.berkeley.edu  
(510) 642-6587

Professor Carlo Séquin  
sequin@cs.berkeley.edu  
(510) 642-5103

Senior Lecturer SOE Emeritus Brian Harvey  
bh@cs.berkeley.edu  
(510) 642-8311

Senior Lecturer SOE Babak Ayazifar  
ayazifar@eecs.berkeley.edu  
(510) 642-9945

Professor Brian Barsky  
barsky@cs.berkeley.edu  
(510) 642-9838