

EDUCATION

- **University of California, Berkeley** Berkeley, California
PhD Student in Electrical Engineering & Computer Science. Aug. 2020 – ~May 2025
Advisor: Prof. Michael (Miki) Lustig. Member of BAIR lab. GPA: 4.0 / 4.0.
- **Pontificia Universidad Católica de Chile (PUC)** Santiago, Chile
Bachelor's Degree in Engineering. Mar. 2014 – Jul. 2018
Electrical Engineering Major, Computer Science Minor.
GPA: 6.6 / 7.0. Ranked No.1 out of 875 students in my graduating class.
- **University of California, Davis** Davis, California
UCEAP Exchange Program, Computer Science & Engineering Major. Sep. 2017 – Mar. 2018
GPA: 4.0 / 4.0. Fall and Winter quarters. Dean's Honor List.

WORK EXPERIENCE

- **Google LLC** Sunnyvale, California
PhD Software Engineer Intern May. 2022 – Aug. 2022
Research on deep learning for differentially private synthetic data generation.
- **HeartVista Inc.** Los Altos, California
Machine Learning Software Engineer Jul. 2018 – Aug. 2020
Develop clinical level deep learning models for the first FDA-cleared self-driving MRI (Magnetic Resonance Imaging).

TEACHING & RESEARCH

- **Graduate Student Researcher** Berkeley Artificial Intelligence Research (BAIR)
Advisor: Prof. Michael Lustig, Ph.D. EECS Department, UC Berkeley
Research in Machine Learning and Biofeedback for MRI. 2020 - Present
- **Graduate Student Instructor** EECS Department, UC Berkeley
EECS16A: Designing Information Devices and Systems I Fall 2022
- **Research Assistant – Deep Learning Explainability** CS Department, PUC
Advisors: Prof. Álvaro Soto, Ph.D. and Prof. Juan Carlos Niebles, Ph.D. CS Department, Stanford
“Explaining VQA predictions using visual grounding and a knowledge base”. 2018 - 2019
- **Computer Science Tutor** UC Davis CS Tutoring, UCD
Tutor for CS courses. Weekly tutoring office hours and occasional review sessions. Winter 2018
- **Research Assistant – Sonification of 4D Flow MRI** Biomedical Imaging Center, PUC
Research Advisor: Prof. Pablo Irarrázaval, Ph.D. 2016 - II
- **Project Assistant** Physics Department, PUC
Supervisor: Prof. Juan Pedro Ochoa-Ricoux, Ph.D. 2016 - I
Project: Facilitating the Understanding of University Physics through Class Experiments.
- **Teacher Assistant – Various Courses** PUC
Prepare and lead weekly discussions sessions. Took on average 2 positions per semester. 2015 – 2018
Courses in Engineering, Physics, and Mathematics Departments:

 - *Advanced Python Programming*
 - *Data Structures & Algorithms*
 - *Electronics*
 - *Electromagnetic Theory*
 - *Electricity & Magnetism*
 - *Thermodynamics*
 - *Statics & Dynamics*
 - *Calculus I*
 - *Tennis I*

AWARDS & FELLOWSHIPS

- **EECS Departmental Fellowship** UC Berkeley
Full tuition and fees plus stipend. Fall 2020
- **Academic Excellence Graduation Award** PUC
Distinguished as rank 1st scholar of the Engineering B.S. graduation promotion at PUC. Oct. 2018
- **Dean's Honors List, College of Engineering** UC Davis
Distinguished in both quarters of my exchange program. Fall 2017, Winter 2018
- **Highest Score in Fundamentals of Engineering Examination** PUC
Tested in Feb. 2017 at PUC (1st out of 530 students). Apr. 2017
- **Engineering Honours Scholarship – Matrícula de Honor** PUC
Distinguished as top scholar of the engineering promotion 2014 in PUC. Mar. 2017
(1st out of 875 students)
- **Engineering Honours Scholarship – Matrícula de Honor** PUC
First year 100% Scholarship because of Entry Tests Scores – PSU. Mar. 2014
- **National Admissions Test Double Award** Government of Chile
Doble Puntaje Nacional. Perfect Score in Math and Science Tests for Chilean college entry National Examinations (top 0.002% of total applicants). Equivalent to SAT. Dec. 2013

PUBLICATIONS & PRESENTATIONS

- **ResoNet: Physics Informed Deep Learning based Off-Resonance Correction Trained on Synthetic Data:** A. De Goyeneche, S. Ramachandran, K. Wang, E. Karasan, S. Yu, M. Lustig. In proceedings of the 31st ISMRM Annual Meeting and Exhibition, UK, 2022 (Oral)
- **Rigorous Uncertainty Estimation for MRI Reconstruction:** K. Wang, A. Angelopoulos, A. De Goyeneche, A. Kohli, E. Shimron, S. X. Yu, J. Malik, M. Lustig. In proceedings of the 31st ISMRM Annual Meeting and Exhibition, UK, 2022 (Oral)
- **BladeNet: Rapid PROPELLER Acquisition and Reconstruction for High spatio-temporal Resolution Abdominal MRI:** E. Shimron, A. De Goyeneche, K. Wang, A. B. Syed, S. Vasanaawala, M. Lustig. In proceedings of the 31st ISMRM Annual Meeting and Exhibition, UK, 2022 (Oral)
- **High Fidelity Deep Learning-based MRI Reconstruction with Instance-wise Discriminative Feature Matching Loss:** K. Wang, J. I. Tamir, A. De Goyeneche, U. Wollner, R. Brada, S. Yu, M. Lustig. *Magnetic Resonance in Medicine.*
- **Deep-Learning-Based Motion Correction For Quantitative Cardiac MRI:** A. De Goyeneche, S. Tang, N. O. Addy, B. Hu, W. Overall, J. M. Santos. In proceedings of the 30th ISMRM Annual Meeting and Exhibition, Online, 2021 (Oral)
- **Explaining VQA predictions using Visual Grounding and a Knowledge Base:** F. Riquelme*, A. De Goyeneche*, Y. Zhang, J. C. Niebles, A. Soto. Journal publication at *Image and Vision Computing.* 2020. (*Equal contribution.)
- **One-Click Spine MRI:** A. De Goyeneche, E. Peterson, J. J. He, N. O. Addy, J. M. Santos. Abstract and poster presentation at *Medical Imaging meets NeurIPS Workshop.* Vancouver, Canada. 2019.
- **Automated Cardiac Magnetic Resonance Imaging:** A. De Goyeneche, N. O. Addy, J. M. Santos, B. Hu. Abstract and poster presentation at *American Heart Association Scientific Sessions.* Philadelphia, Pennsylvania. 2019.
- **Rapid Automated Cardiac Imaging:** A. De Goyeneche, N. O. Addy, E. Peterson, H. Islam, W.R. Overall, J. M. Santos, B. Hu. Abstract and poster presentation at *Frontier of AI-Assisted Care (FAC) Scientific Symposium.* Stanford, California. 2019.

LANGUAGES & SKILLS

- **Languages:** Spanish (Native), English (TOEFL iBT: 111/120)
- **Programming Languages:** Python, Matlab, C++, C.
- **Deep Learning Frameworks:** Pytorch, TensorFlow, JAX, Caffe.