

Ryan Tsang

Email: rchtsang@ucdavis.edu Phone: (310) 663-6476

EDUCATION

University of California, Davis – College of Engineering	Present
PhD Student, Electrical and Computer Engineering	
University of California, Berkeley - School of Engineering	December 2019
BS, Electrical Engineering and Computer Science & Engineering Physics	(cumulative) GPA 3.8

RESEARCH EXPERIENCE

Graduate Student Researcher – Prof. Houman Homayoun, UC Davis	2020 - Present
• Developing Hardware and Firmware Security for the IoT Supply Chain	
• Exploring Machine Learning-Enabled Phishing Attacks	
Undergraduate Researcher – Prof. Constance Chang-Hasnain, UC Berkeley	2018 – 2019
• Characterized Resolution in commercial Time of Flight Sensors + integrating in-house HCG VCSELs with commercial ToF sensor	
• Worked in Nanofabrication Lab on Edge Emitting Laser fabrication	

PUBLICATIONS

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- *A. Ajoy, R. Nazaryan, E. Druga, K. Liu, A. Aguilar, B. Han, M. Gierth, J. T. Oon, B. Safvati, **R. Tsang**, J. H. Walton, D. Suter, C. A. Meriles, J. A. Reimer, A. Pines.* “[Room temperature "Optical Nanodiamond Hyperpolarizer": physics, design and operation](#)”. arXiv.org. 26 Nov. 2018.

TEACHING EXPERIENCE

TA for ECE 172 – Embedded Systems	Winter 2021
• Topics include C programming, I/O, Wired Communication Protocols	
Undergraduate Course Staff for Elec. Eng. 16A	Fall 2018 – Present
• Lab TA Fall 2018: Instructed students with weekly labs, building circuits, and EE concepts with weekly Lab Lectures	
• Discussion TA Spring/Fall 2019: Held Bi-Weekly discussion sections and Office Hours, teaching and reviewing concepts from circuit analysis and linear algebra; created and debugged midterm/final exam problems	
• Lab Assistant 2017-2018: Guided students in weekly labs	

HONORS AND AWARDS

UC Berkeley Regent’s and Chancellor’s Scholar
- Most prestigious scholarship offered by UC Berkeley to entering Undergraduate Students
Eta Kappa Nu (IEEE EECS Honor Society) Member
- Membership extended only to top quarter of EECS students during Junior Year
Epsilon Pi (Engineering Physics Honor Society) Charter Member
- Charter member of UC Berkeley Eng. Physics Honor Society, reformed as of 2018

SKILLS

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- Hardware: Basic PCB Design, Soldering, Basic Measurement Devices
 - Microcontrollers: nRF52832/52840, Arduino Uno, CC3200
 - Software: Python, C, Java, NumPy, UNIX Command Line, EAGLE