

- Developing anomaly detection models that classify apnea and hypopnea events from vital sign time-series data; currently working with contact-based gold-standard signals to verify automation feasibility.
- Developing causal inference pipelines to predict event onset, with plans to extend this to sepsis, arrhythmia, atrial fibrillation, and other diseases.

Employment Experience	UCLA Health Summer Research Intern <ul style="list-style-type: none"> • Built data acquisition sensor stack using triple NIR based camera system, using active illumination at 940nm, 850nm and 766nm, with additional FLIR Boson 640 Radiometric camera and TI AWR1443BOOST RF sensor. • Implemented custom serial code in C++ to trigger Arduino-based barker code signal to synchronize our PC's time stamps with the PC in the control room, used to collect the polysomnography (PSG) ground truth data. • Designed custom PCB to protect our PC when barker code signal is transmitted. • Designed software-triggered hardware system to reset RF device, automating longer periods of data collection at the UCLA Health Sleep Disorders Clinic. 	June 2022-September 2022
	California NanoSystems Institute Summer Research Intern <ul style="list-style-type: none"> • Used open source DeepLabCut ResNet CNN to create real-time marker-less pose estimation system for mice subjected to neuro-stimuli by electrodes, for behaviorally-triggered "closed-loop" brain-machine interface • 1/10th the cost of an NDI Polaris Vega system, gold standard for Parkinson's Disease research. 	June 2020-September 2020
Other Experience	UCLA ECE, <i>Teaching Assistant, Upcoming</i> UCLA CS, <i>Teaching Assistant, Upcoming</i>	January 2023-March 2023 April 2023-June 2023
Awards	2022 UCLA ECE VMG GSR Scholarship – \$1,000 2022 UCLA ECE SIGGRAPH 2022 Vancouver Travel Grant – \$1,500 2022 UCLA ECE CVPR 2022 New Orleans Travel Grant – \$1,500 2022 UCLA ECE ICCP 2022 Pasadena Travel Grant – \$500 2021 UCLA ECE Dean's Honors List 2021 NSF REU Fellowship – \$7,500 2020 Intel URP Fellowship – \$1,250 2020 SRC URP Fellowship – \$1,250 2020 UCLA ECE Dean's Honors List	
Community Involvement	UCLA ECE VMG Mentoring Program, <i>Mentor</i> UCLA ACM AI Undergraduate Research Program, <i>Research Mentor</i> UCLA-CalTech Grundfest Lecture Series, <i>Student Volunteer</i>	September 2022-Present September 2022-Present September 2021-May 2022
References	Dr. Achuta Kadambi Assistant Professor of Electrical and Computer Engineering & Computer Science at UCLA, Email: achuta@ee.ucla.edu Dr. Ashley Kita Assistant Professor-in-Residence of Head & Neck Surgery at UCLA Health, Email: akita@mednet.ucla.edu Dr. Laleh Jalilian Clinical Assistant Professor of Anesthesiology & Perioperative Medicine at UCLA David Geffen School of Medicine, Email: ljalilian@mednet.ucla.edu	