Matthew Tang

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Education

University of California, Berkeley — 2018 – 2022

B.S. Electrical Engineering and Computer Science (EECS) | **GPA 4.0**
Regents' and Chancellor's Scholar (top 2%)

Relevant Coursework (*Spring 2020)

[CS170] Efficient Algorithms	[CS61B] Data Structures & Algorithms	[EECS126] Probability & Random Processes*
[CS188] Artificial Intelligence	[CS70] Discrete Math & Probability	[EE16A/B] Designing Information
[CS186] Databases*	[CS61A] Structure of Computer Programs	Devices & Systems I and II

Projects

Universal Subtitler – Cal Hacks — 2019
- Generate subtitles in any language for videos using Google Speech to Text & Translate API
- <u>Back-end</u>: JavaScript, <u>Frontend</u>: JavaScript (Chrome Extension), <u>Team size</u>: Four

ParkMe – HackMIT — 2019
- Crowdsourced parking availability app using computer vision & geocoding for curb detection
- <u>Back-end</u>: JavaScript & Python, <u>Frontend</u>: React, <u>Team size</u>: Four

ShareFund – LA Hacks — 2019
- Democratic hedge fund web app using algorithmic trading and machine learning
- <u>Back-end</u>: JavaScript & Python, <u>Frontend</u>: React, <u>Team size</u>: Three

Aux4All – Cal Hacks — 2018
- Egalitarian song queue & voting system to bypass the limitation of single Bluetooth connection
- <u>Back-end</u>: JavaScript, <u>Frontend</u>: React Native, <u>Team size</u>: Three

Experience

Capital One – Software Engineer Intern — Summer 2019
- Incoming software engineer intern at McLean, Virginia

USC Viterbi Interaction Lab – Summer Undergraduate Researcher — 2019
- Developed a novel model to improve human trust and cooperation with socially-assistive autonomous robotic systems.
- Created an action selector for the robot to estimate human beliefs and take actions to correct them using reinforcement learning for dynamic environments with uncertainty.

Golden Gate Science Olympiad – Director of Operations — 2018 – Present
- Host annual Science Olympiad invitational with 23 events for 1000+ high school students.
- Improve and update website, develop new resource center page using Jekyll, oversee operations and room reservations, meet weekly for planning purposes. 100+ hours service.

Publications

- Matthew Rueben, **Matthew Tang**, Eitan Rothberg, and Maja Mataric, "*Helping Users Develop Accurate Mental Models of Robots' Perceptual Capabilities: A First Approach*" SCRITA held in conjunction with IEEE International Conference on Robot & Human Interactive Communication. (New Delhi, India) **2019**
- **Matthew Tang**, Michael Chu, and Michelle Khine, *"Design & Fabrication of Nanowrinkled Thin Film Sensors for a Finger Flexion Assessment Glove"* AAAS Annual Conference. (Austin, TX) **2018**
- **Matthew Tang**, Michael Chu, and Michelle Khine, *"Fabrication & Evaluation of Gold Dry Electrodes in a Long-Term Wireless Heart Monitor System"* AAAS Annual Conference. (Boston, MA) **2017**

Awards

- Best Use of Google Cloud API 3rd Place at Cal Hacks (110 teams in category) **2019**
- Dean's Honors List, Edward E. Kraft Award (Freshman 4.0 GPA) **2019**
- MIT Beaver Works Autonomous Robot Car Grand Prix: 2nd Place (13 teams total) **2017**

Activities

Eta Kappa Nu Honors Society, Berke1337 (Cybersecurity), Regents/Chancellor's Scholars Assoc

Skills

Python, Java, JavaScript, React, ROS, RViz, LaTeX, Git, C, MATLAB, Arduino, AutoCAD