Matthew Faraz Tootoonchi

Rancho Cucamonga, CA
Cell: (909) 360-6713
https://www.mtootoonchi.com/
https://www.linkedin.com/in/mftootoonchi/
https://github.com/mtootoonchi
mftootoonchi@gmail.com

EDUCATION

California State Polytechnic University, Pomona
Bachelor of Science in Computer Engineering, Core GPA: 3.61

TECHNICAL SKILLS

- Software – Experienced in object-oriented design, algorithm design and data structures in multiple programming languages like C/C++, C#, Python, Java, Lua, and Assembly
  - Adapt at web development techniques like HTML, CSS, and JavaScript
  - Skilled at using search engines and ChatGPT for information
- Hardware – Utilized Verilog and System Verilog in FPGA implementation with or without an SOC
  - Controlled multiple different Microcontrollers with a variety of programming languages
- Extra – Bilingual with the ability to speak both English and Farsi

PROJECTS

UAVs Docking   Spring 2022

- Using computer vision based sensor (Pix2Cam) for tracking barcode on drones
- Worked with multiple flight controllers like the Navio2 and Pixhawk wired to the Raspberry Pi and connected them to Mission Planner and python dronekit
- Talked with multiple experts in different jobs to devise a plan to develop our goals
- Selected to represent Cal Poly Pomina at the 36th Annual CSU Student Research Competition where our team was awarded $100 for winning
- A member of TOI-1231b team, which received an honorable mention from NASA MINDS 2022

Embedded OpenCV Web Server   Spring 2023

- Designed an object identifying algorithm using OpenCV in python to identify, circle, and count mints with a camera (Raspberry Pi Camera Module V2)
- Created an embedded web server (Raspberry Pi 3 B+) with flask that automatically connects to a router to send data locally to any internet browser
- Utilized HTML, CSS, and JavaScript to create an interactable webpage to send real-time video of identified, circled, and counted mints for any internet browser
- Contributed to open-source projects on GitHub

WORK EXPERIENCE

Codakid, *Tutor*   May 2021 – Present

- Correctly tutored up to 9 classes a day on how to program in java, Lua, Python, and Scratch
- Adapted to an ever-changing schedule due to kids needing specialized learning to fit their needs.
- Demonstrated that my tutees were able to build upon what they have been taught to create their own code