

Grant Skidmore

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www.linkedin.com/in/grant-skidmore

<https://github.com/GSkid>

Skills

Programming: C++, C, Python, HTML, CSS, Javascript, SQLite

Technology Skills: Git & Github, OOP, Embedded Linux, SOLIDWORKS, Google Sheets, Computer Hardware Installation, EE Lab Equipment, Eagle PCB

Projects

MNIST Neural Network Image Classification - [code](#)

- ❖ A python program that classifies images of handwritten digits from the MNIST database, trains a neural network to identify digits, and tests accuracy by digit (~94% accurate)
- ❖ Implemented with PyTorch, which uses GPU cuda cores to make computation ~50x faster

Intuitive Auto-Irrigation System (Team Lead) - [code](#) | [website](#)

- ❖ Constructed a wireless ad-hoc one-hop sensor network controlled with C, C++, and Python
- ❖ Utilized an embedded linux Raspberry Pi as a master with up to 255 Arduino Nano nodes tested at a maximum 425ft inter-node communication range using the nRF24L01 radio transceiver
- ❖ Applied data collected from the sensor network and forecast data to reduce waste water consumption by up to 50% in residential irrigation by selectively watering only when needed

Autonomous Mechatronics Robot (Team Lead) - [code](#) | [website](#)

- ❖ Created an autonomous robot using an Uno32 embedded microcontroller running on bare metal
- ❖ Built a depth-first hierarchical state machine in C to manage sensors and run control logic
- ❖ Finished with the fastest time (1:25 for a 2:00 course) and 2nd overall out of 18 teams

Work Experience

Tech Support Internship Oct 2020 - Present

GAO Tek; *Los Altos, CA*

- ❖ Provided virtual tech support including webpages, spreadsheets, & PC maintenance

Teaching Assistant Jan 2020 - June 2020

UC Santa Cruz; *Santa Cruz, CA*

- ❖ C & Embedded Systems: quickly debug and explain errors in students' C & C++ projects
- ❖ Analog Electronics for Bioengineers: graded student reports & validated electrical designs

Student Instructor Sep 2017 - June 2020

UC Santa Cruz; *Santa Cruz, CA*

- ❖ Instructed UCSC's largest-ever student-taught class (140 students)
- ❖ Created and presented weekly lectures and structured lesson plans
- ❖ Established relationships with university admin to preserve program longevity

Coach/Pro-Shop Feb 2014 - Apr 2020

Deep Cliff Golf Course; *Cupertino, CA*

- ❖ Taught golf & helped run the Junior Golf Camps (both private golf lessons and coaching)
- ❖ Handled customer concerns, eg. check-ins, sales, re-gripping ([Yelp review about me](#))

Education

B.S. Bioengineering [Bioelectronics] - *Graduated with honors*

University of California, Santa Cruz

--Please also visit my website at: gskid.github.io--