

Danny Avery

Computer Engineer

dcavery@ucsc.edu
(916) 897-7713
<https://dcavery.ninja>

EDUCATION

2020 *Bachelor of Science from University of California, Santa Cruz,*
Computer Science and Engineering: Computer Systems Concentration

EXPERIENCE

2019 **Circuit Designer**
Aeroasis LLC (Feb - Aug)
Lead for the electronic hardware design, managed consultants and manufacturers, interviewed potential contractor hires, product development and testing.

2018 **Soundscapes Designer**
Monterey Bay Aquarium Research Institute (Jun - Dec)
Independently researched and developed exhibit from start to finish, self-taught Linux, Bash, and Pi Presents software.

2018 **Product Design Intern**
deMETER (Jun - Sep)
Connected and analyzed sensor data over I2C connection to an Arduino, UI/UX design for web app, reviewed product datasheets for compatibility.

2018 **Exhibit Designer**
Sanctuary Exploration Center (Apr - Aug)
Restored exhibits within the confines of custom enclosures, designed an affordable wind tunnel donation box using hairdryer, taught clients to edit software I implemented.

SKILLS

Languages

Python, C, C++,
Latex, Bash, Java,
LC-3, HC11.

Software

Verilog, Git,
PSoC Creator 4.2.

Hardware

FPGA, IoT,
Raspberry Pi,
Arduino, PSoC.

Concepts

Agile, CI/CD.

Academics

Comp Networks,
Microcontroller Sys,
Comp Architecture,
Abstract Data Types,
Logic Design.

PROJECTS

2020 **Automated Hydroponic Unit** Sensor data collection, state-based actuator triggering, market research, team leadership, gant chart work distribution.

2019 **Raspberry Pi Button Array** AV system integration, soldering, Linux file management, Bash scripting, modular prototyping, debugging electronic wiring.

2019 **Shopping Website and Server** Web2Py Python server hosting on local host, HTML, CSS and JS animated site, access control using cookies.

2018 **Hardware Logic Falling Game** HSync and VSync pixel coloring, state-machine based logic, Verilog programmed FPGA, real-time response to user input.