# Zane Deaton

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## EDUCATION

COLORADO SCHOOL OF MINES, Golden, CO                                                              2021
**B.S. Computer Science Research Honors**
**Minor Computational and Applied Math**

## SKILLS

**Computer:** C++, SQL, Python, MATLAB, and R Proficiency; Raspberry Pi, Arduino, Linux, Office Suite
**Communication:** Public speaking, technical writing
**Other:** Critical thinking, problem solving, team-leadership, communication, ability to quickly adapt and self-teach.

## JOB EXPERIENCE

**Gogo Software Test and Configuration Engineer Intern (May 2019-August 2019)**
- ❖ Worked to physically optimize test bench configuration
- ❖ Created python scripts that allows for a dynamic allocation of benches for the nightly regression analysis, which reduced nightly regression analysis by 4 hours
- ❖ Utilized Agile methodology and GitHub to streamline the development process
- ❖ Used DevOPs tools such as Jenkins to successfully deploy code
- ❖ Worked with software testing tools such as PyTest to test code

**CSM Researcher at NEMOS (Networking and Mobile Sensing Lab)**

**App Use Identification Via Packet Sniffing:**
- ❖ Testing if it is possible to determine app usage based on encrypted packets sent by mobile devices
- ❖ Utilizing machine learning techniques to learn differences between application packets
- ❖ Designing and implementing possible countermeasures to packet sniffing techniques

**Fingerprinting Mobile Devices Via Sensor Data:**
- ❖ Worked on designing a way to fingerprint devices with a special focus in fingerprinting mobile devices
- ❖ Applied MATLAB and analytical techniques to examine data collected from smartphones
- ❖ Used machine learning techniques to create a unique identifier for mobile devices by analyzing the manufacturing inconsistencies that appear in smartphone sensors i.e. Accelerometers and Gyroscopes
- ❖ Designed and implementing counter-measures to the device fingerprinting, such as obfuscation
- ❖ Created new uses for the fingerprinting techniques such as being able to tell who is using any given device by utilizing biometrics.

## PROJECT EXPERIENCE

**CSM EPICS 151: Growing Algae using Dog Waste and Auto-Harvesting using Raspberry Pi**
- ❖ Worked with sensor data and a raspberry pi to create a system to auto-harvest algae once it reached a certain density.
- ❖ Worked with team members from different disciplines to specialize and more effectively complete tasks.