MATTHEW MERIOLES

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EDUCATION

University of California, San Diego   **September 2020 - June 2024**
B.Sc. Electrical Engineering: Machine Learning & Controls
Coursework: Data Networks I/II · Software Foundations A/B · Deep Learning · Intelligent Systems

EXPERIENCE

Northrop Grumman · Electronics & Payloads Intern   **June 2023 - August 2023**
Networks NATO - RQ4 Global Hawk
- Developed a scalable Python application to remotely connect with network devices and perform configuration analysis, resulting in a streamlined network configuration and validation workflow
- Created and configured Ansible scripts for Cisco Modeling Labs in support of company digitization efforts
- Collaborated with network engineers to design, test, and integrate network infrastructure
Skills involved: Python · Software Development · Object Oriented Design · CML · Ansible

Northrop Grumman · Electronics & Payloads Intern   **June 2022 - August 2022**
Networks Japan - RQ4 Global Hawk
- Used Cisco Modeling Labs to design, test, and configure WAN/LAN architecture
- Wrote automation scripts in Python and VBA to optimize workflow and organization
- Worked on database form submission and product life-cycle, utilizing Jira with agile practices
Skills involved: Cisco Modeling Labs · Python · VBA · Jira · Teamcenter · Agile

Boeing · Electrical Engineering Intern   **June 2019 - August 2019**
EEE Parts and Failure Analysis
- Utilized LabVIEW and various software to test and electronic components in areas of performance, reliability, and quality in varying temperature environments
- Recorded and submitted information regarding electrical components for product development
Skills involved: LabVIEW · Component Testing · Data Analysis · Product Lifecycle Support

Web Developer   **March 2023 - June 2024**
Japanese Student Association, UC San Diego
- Designed, tested, and implemented various features onto the JSA website including a user login system, interactive image gallery, and an image upload feature
Skills involved: HTML · CSS · JS · Firebase · Git · Vue.js · React

PROJECTS

Jetson Nano Autonomous Vehicle   **January 2023 - March 2023**
- Designed, prototyped, and developed an autonomous vehicle to navigate though a track using different methods
Skills involved: Python · OpenCV · Fast Prototyping · ROS2 · GPS/GNSS · Docker · Linux

Electronic Taiko Drum   **September 2021 - December 2021**
- A project designed to take input from piezoelectric transducers and map them to a custom drum controller
Skills involved: Arduino · C++ · Signal Processing · Analog-to-Digital Conversion · Woodworking

SKILLS

Languages: C/C++ · Python · Ansible · MATLAB · LabVIEW · Verilog · SQL · HTML · CSS · JS
Technologies: CML · Wireshark · Mininet · LTspice/PSpice · Linux · Docker · git · Jira · LaTeX
Certifications: Active Top Secret Security Clearance
Spoken: English (Native) · Japanese (Advanced) · Spanish (Conversational)