MATTHEW MERIOLES

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EDUCATION

University of California, San Diego

September 2020 - Current

Bachelor of Science, Electrical Engineering: Machine Learning & Controls

Coursework: Data Networks · Software Foundations · 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 \cdot Software Development \cdot Object Oriented Design \cdot CML \cdot 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 \cdot Python \cdot VBA \cdot Jira \cdot Teamcenter \cdot 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 - Present

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: $HTML \cdot CSS \cdot JS \cdot Firebase \cdot Git \cdot Vue.js \cdot React$

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: $C/C++\cdot Python \cdot Ansible \cdot MATLAB \cdot LabVIEW \cdot Verilog \cdot SQL$

Technologies: CML · LTspice/PSpice · Linux · Autodesk · git · Microsoft Office · LATFX

Certifications: Active Top Secret Security Clearance

Spoken: English (Native) · Japanese (Advanced) · Spanish (Conversational)