

ELIAV MAAS

Systems Engineer

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EXPERIENCE

NASA Jet Propulsion Laboratory - *Systems Engineer*

November 2022 - January 2025

GRACE-C Mission: Instrument Systems Engineer

May 2024 - January 2025

- Built custom hardware/python software package for raster scans experiments cutting time from hours to minutes.
- Owned and maintained custom python package to monitor telemetry from ground support equipment (power supplies, temperature controllers, DAQ) and react to anomaly detection. This includes building custom drivers for hardware, developing updates, fixing bugs on the fly, and creating documentation.

Chronograph Instrument (CGI) Mission: Thermal Verification Lead Engineer

August 2023 - May 2024

- Led thermal and EMI/EMC testing through FFT and TVAC. Orchestrated and distributed tasks in the completion of test operations while tracking anomalies and troubleshooting solutions in real time.
- Authored verification procedures based on project requirements to test the CGI thermal subsystem.
- Designed custom automation scripts in spacecraft command language (STOL) for thermal and EMI/EMC testing.
- Held formal data reviews with stakeholders to ensure flight requirements tracked in DNG were successfully met.

NISAR Mission: System Testbed Engineer

November 2022 - August 2023

- Produced procedures and automation (Robot Framework) for integration of L-SAR instrument into system testbed.
- Led commanding of NISAR spacecraft testbed to support deploy/flight/software/operations/V&V testing.
- On the fly diagnosis, troubleshooting, resolution of issues and anomalies using software tools and electronic diagnostic equipment (power supplies, oscilloscopes, signal generators, and spectrum analyzers).

Riderz Labs LLC - *Engineering/Networking Consultant*

January 2021 - Present

- Implemented a custom integration for legacy software, enabling seamless transition to remote work during the COVID-19 pandemic. Utilized Terraform and OpenVPN to configure a cloud-based network and database on AWS.
- Developed the following websites using modern web technologies including Terraform, AWS (EC2, S3, Lambda, SES, Route53, Cloudfront, VPC), React, Webpack, and GitHub Actions: verbalab.ucsf.edu, bayac.org, daienychin.com, tensegritymarin.com, sustainabilityservicecorps.org, accumulationstrategies.com

Miso Robotics - *Systems Engineer*

October 2021 - November 2022

- Managed a team of 3 engineers and 2 technicians and met goal of rapidly generating multiple iterations of a novel fryer robotic system. Owning system integration, electrical, testing, and several software packages.
- Deployed fryer robotic system to a test kitchen within a 5 month time-frame and released to a live restaurant in less than 1 year of total development time, ensuring robust communication between all electrical and software subsystems.
- Reverse-engineered off the shelf food dispenser, integrated load cells/esp-32 micro controller with custom embedded code/python ROS package to convert from manual control to automated weight-based portioning with 85% accuracy.
- Determined specifications and requirements for all electronic components to reduce scope, complexity, and cost of system. Maintained electrical BOM to ensure consistent availability, assembly, and installation.
- Designed SICK PLC program to guarantee safe operation and ISO regulatory compliance of single fryer robotic system.
- Orchestrated and successfully obtained electrical safety certification (ETL) for robotic system in less than 2 months.

Axiom Cloud - *Systems Engineer*

January 2021 - August 2021

- Engineered a novel PID based control algorithm to balance safety margins and energy usage for commercial refrigeration systems, reducing the required number of human operators to monitor the active fleet of grocery stores by 70 %.
- Created a custom python based software package to automatically parse refrigeration data and configuration.
- Deployed and maintained microservices in production Kubernetes environment.

Darktrace - *Cyber Threat Analyst: Industrial Control Systems*

June 2017 - December 2018

- Spearheaded the deployment of tailored cybersecurity solutions, engineered for seamless integration with customer network architecture and traffic demands, ensuring robust protection and performance.
- Authored technical reports on network anomalies, providing analysis and clear of issues and resolutions for customers.

EDUCATION

University of Southern California

December 2020

M.S. in Electrical Engineering: Controls/Signals and Systems

GPA: 3.9

University of California, Berkeley

May 2017

B.S. in Chemical Engineering & Nuclear Engineering, Graduated With Honors

GPA: 3.8