ELLIOT T TRAPP

SOFTWARE AND MISSION OPERATIONS ENGINEER

TECHNICAL SKILLS

Python
Javascript
Ruby
Perl
SQL
AWS ElasticSearch/OpenSearch
AWS Lambda
AWS EC2
AWS ECS
AWS S3
AWS IAM
AWS APIGateway/R53
AWS Cloudwatch
AWS Cloudformation
Serverless
Terraform
Docker
Puppet
Tensorflow
Keras
Jupyter Notebooks

AWARDS

NASA JPL Voyager Award

April 2022

NASA JPL Team Award

Sept 2022

June 2022

Sept 2021

CERTIFICATIONS

AWS Advanceduser

January 2021 | NASA JPL

COURSE WORK

Cost Effective Mission Operations

Oct 2020 | NASA APPEL

Managing Virtual Teams

Nov 2022 | NASA APPEL

Anomaly Risk Rating

Jan 2020 | NASA APPEL

EXPERIENCE

Software and Mission Operations Engineer
NASA Jet Propulsion Laboratory
Since January 2019

- Integrated orbiter telemetry into a Mars 2020 landing visualization empowering the world to witness the real-time location of the MRO and MAVEN orbiters on landing night

- Architected, deployed, and administered AWS data lake infrastructure enabling 27 operational engineering teams to share mission critical data between both public and private international partners

- Adapted Europa Clipper command dictionary schemas to meet technical requirements of the new Sample Return Lander (SRL) project

- Implemented new Ground Data System (GDS) paradigm for radiating command products to 12 operational spacecraft via new Space Link Extension Command Client (SCC)

- Deployed and administered JIRA customer service desk, automating customer ticket tracking and work status reporting

- Lead a team of 4 engineers providing mission critical operations support to 12 flight projects

- Mentored and managed three cohorts of interns on the fundamentals of mission operations

Software Engineering Intern
NASA Johnson Space Center
August 2018 - January 2019

- Developed a Recurrent Neural Network model that classified astronaut's cognitive workload based on pupillometry image data

- Authored Python and MATLAB libraries to automate data cleaning, ingestion, and verification of pupillometery data

EDUCATION

Master of Science, Computer Science
August 2016 - June 2018

DePaul University, Chicago

Master of Arts, Philosophy
August 2012 - June 2015

The New School for Social Research, New York

Bachelor of Arts, Philosophy, Political Science, Mandarin
August 2007 - June 2011

DePaul University, Chicago