

KENNY ROFFO

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State University of New York at Oswego

B.S. Physics, Mathematics, Computer Science, Honors Program, 3.66

May 2017

PROFESSIONAL EXPERIENCE

NASA Jet Propulsion Laboratory

Engineering Applications Software Engineer

June 2017 – Present

Pasadena, CA, USA

Aerie (Open Source)

2019 – Present

On Aerie we have been designing and building a service-based architecture aimed at addressing mission planning needs, including simulation and scheduling needs. I have worked as an engineer on the backend which is primarily in Java. Aerie's tech stack includes Java, Gradle, Docker, Javalin, Hasura, GraphQL, PostgreSQL and Typescript.

Europa Lander

2020 – Present

For Lander I have developed a java-based mission model aimed at simulating different mission scenarios enabling us to explore alternative mission concepts very early on in mission development. I have built a highly configurable model that generates and simulates an activity plan for the full mission from landing to death, using JPL's Blackbird simulation engine.

Flight Software Core (FSWCore)

2019 – 2020

Developed tests in C for the sequencing engine component of the flight software project FSWCore. This work involved a bit of requirements engineering, and each test was very tightly tied to a specific requirement being tested.

InSight

2017 – 2019

Worked with two others to develop Python-based tools to perform various tasks from file conversions to generating full web-page reports. Our most notable product was an excel-like UI fully integrated with our simulation and reporting tools.

RESEARCH & INTERNSHIP EXPERIENCE

NASA Jet Propulsion Laboratory

Software Engineer Intern - Web development

September 2016 – December 2016

Pasadena, CA, USA

SAGE, Max-Planck Institute for Solar System Research

Research Assistant - Analysis of Red Giant Branch Bump

Summer 2016

Goettingen, Germany

NASA Jet Propulsion Laboratory

Software Engineer Intern - Web Development

Summer 2015

Pasadena, CA, USA

Department of Physics & Astrophysics, University of Delhi

Research Assistant - Analysis of RR Lyrae variable stars

Summer 2014

New Delhi, India

TECHNICAL SKILLS

Languages

Java, Python, C/C++, Javascript, HTML/CSS

Tools

Git, PostgreSQL, Docker, Hasura, Emacs, IntelliJ, Jira

AWARDS

NASA Honors Award, NASA

September 28, 2020

To the InSight Mission Planning and Sequencing Team for developing maintaining and operating a robust Planning and Sequencing System in support of deployment HP3 recovery and science monitoring operations.

NASA Group Achievement Award, NASA

August 28, 2019

To the InSight Surface Activity Planning Development Team for design and implementation of the new Science Plan Integrator tool suite enabling tactical surface operations.

Successful completion of the Link Complexity and Maintenance Tool, NASA JPL

July 13, 2018

Development and Delivery of the Link Complexity Scheduling Tool, NASA JPL

Sept. 22, 2017