

Washington D.C. Metro Area
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Software engineer with over 7 years of experience in API development, full stack development, and data ETL. Strongest in Python back-end development, experienced with fast-paced development teams, and interested in tackling problems that require understanding language internals and building a depth of knowledge of the system and its stack.

## **Experience**

Apr 2022 - Present

#### **Senior Software Systems Engineer**

MITRE \* McLean. VA

- Created a modular Python library for creating data analysis pipelines, based on MATLAB prototypes developed by another team member.
  - Designed the library to be extensible, with interfaces and abstract classes to represent recurring patterns in the prototype steps, to accommodate rapidly changing requirements.
  - Integrated the library as a service for an existing Django application.
- Built data ingest tools for multiple data ETL efforts which extracted up to millions of records from sources and transformed them to fit a standardized format for analysis. Utilized Python libraries such as Pydantic, Boto3, Requests, and Beautiful Soup.

Aug 2019 - Apr 2022

#### **Software Systems Engineer**

MITRE + McLean, VA

- Added tests and built new functionality for a Python REST API, and developed a multicontainer Docker system for deployment, with additional services for Redis and JupyterHub.
  - Added the capability to interface with the system's REST API to 2 external applications.
- Built Python and Java applications to stream and time-synchronize data from a Tobii Glasses 3 unit and a Polar H10 unit using Lab Streaming Layer (LSL) and the sensors' APIs.
  - Communicated with customers after delivery to discuss setup, deliver bug fixes, and describe development obstacles.
- Worked closely with team members, analysts, users, and sponsors to define requirements for projects. Traveled to meet directly with stakeholders and communicated feedback and requirements back to the team.
- Created components for several React applications that integrated with back-end Python REST APIs, and demoed components for stakeholders.

Oct 2017 - July 2019

### **Software Developer**

U.S. Navy + Dahlgren, VA

- Created features for a Java EE REST API prototype with a JSF front-end and SQL database.
- Integrated projects into a DevOps testing pipeline that included Jira, Gradle, Nexus, and internal software.
- Mentored other employees on DevOps tools and unit testing with TestNG and Mockito.

June 2016 - Jan 2017

#### **Web Applications Development Intern**

Blue Star > McLean, VA

- Rebuilt an internal job positions app in Ruby on Rails. Added OAuth authentication and deployed on AWS Elastic Beanstalk.
- Transitioned the company's external site to Jekyll to improve maintainability. Made improvements to the site UI based on feedback from company staff.

#### Skills

Languages: Python, Java, JavaScript, HTML, CSS/SASS Tools and Frameworks: Flask, Git, React, Jira, Docker

Datastores: PostgreSQL, Elasticsearch, Redis

# Education

Aug 2013 - May 2017

#### **B.S. in Computer Science**

- Graduated Magna Cum Laude with 3.6 GPA. Minored in digital studies and data science.
- Awarded the Ralph A. Niemann Scholarship in Computer Science in 2016.
- Completed undergraduate research simulating restaurant wait times with Wi-Fi packet data during the summer of 2015. Presented results at the 2016 Summer Simulation Multi-Conference in Montréal.