

EXPERIENCE

• **Allen Institute for Brain Science (AIBS)**

Scientific Data Engineer III

Seattle, WA

January 2022 - Current

- Built ingest pipeline for -omics and spatial transcriptomics datasets into Allen Brain Cell Atlas
- Built ingest pipeline for semi-automated release of raw -omics data from BRAIN Initiative Cell Atlas Network (BICAN) R24 data archive and the Neuroanatomy-anchored Information Management Platform (NIMP)
- Built integrations with services resolving gene annotations, anatomical atlases, and cell type annotations
- Facilitated FAIR data practices by implementing metadata validation models and standards for -omics datasets in BICAN consortium
- Built community project/data collection registration application for BRAIN Cell Data Center (BCDC)
- Curated data for BCDC Data Catalog

• **Ernst & Young**

Senior Software Engineer

Arlington, VA

December 2019 – February 2021

Client: Large Pharmaceutical Firm

- Led team of four developers in Identity and Access Management (IAM) system design and implementation
- Drafted qualification documentation for system implementation and deployment
- Managed project timeline and engineering backlog using Kanban strategy on Microsoft Azure DevOps

Client: Large Manufacturing Firm

- Co-authored assessment of client IAM practices regarding existing Amazon Web Services (AWS) infrastructure
- Developed prototype integration between AWS IAM and existing client IAM system
- Demonstrated prototype functionality both to internal and client leadership

Internal: Internship Project

- Architected and built front-end infrastructure for IAM system performance dashboard
- Led code reviews and mentored interns in engineering practices

• **Sila Solutions Group (Acquired by Ernst & Young)**

Software Engineer

Arlington, VA

July 2018 - December 2019

Client: Financial Services Firm

- Led team of six developers/analysts in IAM feature implementation
- Presented project progress at weekly status meetings with client leadership
- Mentored three new developers in engineering practices
- Led largescale upgrade of legacy system
- Wrote and executed full regression testing suite for legacy system

• **Booz Allen Hamilton**

Software Engineering Consultant

Tyson's Corner, VA

September 2017 - July 2018

- Built RESTful API around search application using Flask and ElasticSearch
- Designed data model and implemented ORM for chat application using PostgreSQL and SQLAlchemy
- Wrote unit/integration tests for previously untested modules
- Implemented unsupervised, corpus agnostic named entity recognition algorithm
- Deployed containerized prototypes on AWS EC2 instances using nginx and Docker

• **College of William & Mary**

Undergraduate Research Assistant

Williamsburg, VA

September 2015 - May 2017

- Built integrate-and-fire model of CA3 subregion supported by NSF funded EXTREEMS-QED program
- Built signal processing pipeline for time series data sets using Python and MATLAB
- Created data visualizations of model behavior in R
- Wrote and successfully defended Undergraduate Honors Thesis

EDUCATION

- **College of William & Mary**

B.S. Neuroscience, Minor: Computer Science

Williamsburg, VA

August 2009 – May 2017

PROJECTS

- **groupbool.xyz**: Static music discovery and analytics blog. Built with GCP functions that aggregate Spotify data.

SKILLS

- **Languages**: Python, Java, MATLAB, R, HTML/CSS
- **DevOps**: AWS EC2/RDS/S3/Lambda, Azure DevOps, Google Cloud Platform