

Experience

Senior Associate Software Engineer, Card Tech DevOps — Capital One, McLean, VA Mar 2024 – Present

- Delivered feature to deploy AWS resource stacks in parallel, reducing time by ~35% or 200 minutes per release; completed in half the expected time. Won TechX CIO Award Q3 2024.
- Led production of conversion documentation to save an estimated 1,000+ man-hours across hundreds of Card Tech teams in year-long migration to new infrastructure-as-code pipeline.
- Created regression tests for major pipeline component that improved the resilience against breaking changes impacting users, doubling the team productivity.

Associate Software Engineer, Data Science Feature Platform — Capital One, McLean, VA Feb 2023 – Feb 2024

- Designed and implemented a stateless Lambda API to enforce platform-wide governance policies for multiple components serving 40,000+ user-created machine learning data “features”, centralizing and streamlining future policy changes.
- Conducted cross-team end-to-end integration testing to validate that the full feature lifecycle supported business needs and met SLAs.
- Enhanced Python SDK to localize compliance checks that ensure data compliance of Feature Platform power users.

Software Engineering Intern, Data Science Feature Platform — Capital One, McLean, VA Jun – Aug 2022

- Developed proof-of-concept of new workflow to collect and show information about feature datasets to improve data scientists’ visibility of data drift in their machine learning models.
- Utilized AWS to configure OpenSearch data storage and Lambda API proxy for retrieving data drift results. Created a React.js webpage that calls the API and produces charts with the results.

Software Engineering Intern, Innovation Research — Suvoda, Conshohocken, PA Jun – Aug 2021

- Researched areas for future innovation in Suvoda’s clinical trial platform and proposed several machine learning approaches (e.g., time series regression), libraries and tools for solutions.
- Analyzed quality of data in Microsoft SQL Server to determine its strengths and pitfalls for using it in the proposed machine learning approaches.
- Presented findings and recommendations to senior management of Product Development.

Education

University of Maryland, College Park 2021 – 2022
Master of Science, Computer Science GPA 4.0

Research in *Vision Transformer for Image Clustering*

University of Maryland, College Park 2018 – 2021
Bachelor of Science, Computer Science and Mathematics GPA 3.94
Cum Laude

Selected coursework: Machine Learning, Data Science, Software Engineering, Data Structures, Algorithms, OO Programming, Computer Vision, Multivariable Calculus, Linear Algebra, Statistics

Skills

Certifications: AWS Certified Solutions Architect - Associate

Languages: Python, Golang, Java, Groovy, JavaScript, C, C++, C#, OCaml, R, SQL, MATLAB, HTML, CSS

Libraries and tools: AWS, AWS CloudFormation and CDK, Docker, Snowflake, Splunk, Jenkins, PyTorch, TensorFlow, React.js, Node.js, Kubernetes, Git, GitHub

Manager evaluation: Able to work through ambiguous problems beyond expectation