

## Experience

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

- Delivered parallelization feature that saved on average roughly 200 minutes per pipeline run; completed in half the expected time. Recognized by CIO as TechX Award winner Q3 2024.
- Spearheaded documentation effort to save approximately 1,500+ man-hours across hundreds of Card Tech teams in year-long migration to new pipeline.
- Led creation of regression tests for pipeline component, providing additional resilience against breaking changes impacting users while reducing test duration from 40 minutes to 5 minutes.

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

- Designed and developed an API to enforce platform-wide governance policies of 40,000+ user-created machine learning features, centralizing and streamlining policy changes.
- Conducted end-to-end integration testing to ensure the full feature lifecycle supported business needs and met SLAs.
- Enhanced Python SDK to enforce proper data compliance of Feature Platform power users.

**Software Engineering Intern — Capital One, McLean, VA** Jun – Aug 2022

- Developed a proof-of-concept workflow that collects and displays information about feature datasets to give data scientists greater insight and confidence in detecting data drift within their machine learning models.
- Utilized AWS to host data storage and a proxy API for retrieving data drift results. Created a React.js webpage which calls the API and produces charts containing the feature dataset information for data scientists.

**Software Engineering Intern — 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 data stored in Microsoft SQL Server databases qualitatively and with SQL queries to report on strengths and pitfalls for use in proposed machine learning approaches.
- Presented research findings to senior management of Product Development.

## Education

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**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

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

## Skills

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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 IaC, Git, GitHub, Docker, Snowflake, Splunk, Jenkins, PyTorch, TensorFlow, React.js, Node.js, Kubernetes