

Andrew Ni

☎ (202)-594-7168 | ✉ andrewni2334@gmail.com | in andrewni123 | 🌐 andrewni2334

EXPERIENCE

Software Engineer | Capital One

August 2021 – Present

Anti-Money Laundering Team

- Pioneer disaster recovery failover strategy of services hosted on AWS EMR, SNS, & Lambda in under 4 hours
- Develop system of 300+ alerts using Splunk & PagerDuty to report issues in data loading & aggregation services
- Lead vulnerability management team of 4 to remediate Infrastructure, Container, and App Security issues
- Redesigned error handling logic of the transaction processing service for over 200 million financial accounts

Snowflake Sink Team

- Architected asynchronous migration validation API for datasets stored in Snowflake & AWS S3 data lake
- Provide production support on Snowflake Sink layer during data ingestion/exgestion using observability tools
- Implemented & monitored data loads using analytic & visualization features from DataDog & Splunk
- Configured Jenkins & Git integration to automate the testing and deployment of Scala-based applications

Software Engineering Intern | Capital One

May 2020 – August 2020

- Triage & reported non-compliant users from over 700 AWS accounts using AWS IAM, CloudWatch, CloudTrail
- Integrated risk assessment API to develop a risk calculation algorithm based on cloud service actions
- Identified cloud-based malicious behaviors using AWS CloudSearch and Unix shell scripts from log data
- Leveraged data visualizations using Python to articulate security issues within Capital One's cloud infrastructure

Data Science Intern | Marriott International

May 2019 – August 2019

- Preprocessed over 10 billion records of web session data across Marriott's 7,300+ properties using Apache Hadoop
- Launched hotel recommendation algorithms using Python's machine learning libraries (numpy, pandas, Pyspark)
- Optimized performance of machine learning models, comparing content-based & collaborative filtering algorithms
- Improved performance by 32% using NDCG metric compared to baseline distance + tier recommendations

Coding Camp Instructor | iD Tech

May 2018 – August 2018

- Educated complex computer science concepts to students with non-technical backgrounds in classes sizes of 10
- Provided hands-on support troubleshooting independent projects written in Python, Java, and LUA (Roblox)

EDUCATION

University of Virginia

August 2017 – May 2021

Bachelor of Science in Computer Science, Minor in Business

Charlottesville, VA

- GPA: 3.7, *Graduated with Distinction*

CERTIFICATIONS

Amazon Web Services (AWS) Certified Solutions Architect - Associate

April 2022

- Validation Number: WF0MQG7DPF1E1F3B

TECHNICAL SKILLS

Languages: Java, Python, SQL, Scala, Bash/Shell, JavaScript, HTML/CSS, Unix, C++, R

Software: Snowflake, Splunk, PagerDuty, Apache Spark & Hadoop, Git/Github, Datadog, Jira, Postman

Libraries: Boto3, PySpark, MLlib, node, npm, JQ, pandas, NumPy, Matplotlib

Concepts: Object Oriented Programming (OOP), Functional Programming, RESTful API, Database Management, Git Workflow, SDLC, Agile Methodology, Continuous Integration/Delivery (CI/CD)

OTHER INVOLVEMENTS

Mentor | Capital One Coders

Summer 2020 - Present

- Provide computer science education in HTML/CSS to local high school students and inspire passion in technology

Professional Portfolio | React Website – *JavaScript, node.js*

March 2024

- Creating a website aimed to showcase my talents in a creative way through deploying a React App to github.io

HooGives | Python Web Application – *Django, Heroku*

Spring 2020

- Built marketplace app designed to increase university student engagement in local philanthropic opportunities