Alexander E. Dziarnowski

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Education

Master of Science (M.S.) in Computer Science, May 2024 to Present
> *University of Colorado Boulder, Boulder, CO*
> *Coursework: Software Architecture for Big Data, Data Structures and Algorithms, Machine Learning*

Bachelor of Science (B.S.) in Finance, August 2016 to May 2020
> *Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA*
> *Concentration: Investment Management and CFA*

Work Experience

Software Engineer

Capital One, McLean, VA, August 2022 to October 2023

- AWS, Jenkins, Terraform, Python, Docker, Typescript, React.js
- Engineered and maintained a scalable infrastructure using ECS, Redis, and RDS to host the Nuxeo platform, supporting over 200 customers
- Collaborated within a pluridisciplinary team including internal teams in the Enterprise Consumer Product org and external customers like JCPenny, and identified functional & system requirements, researched adequate technologies, and selected design patterns
- Implemented automatic failover for east and west regions using Route53, SNS, Cloudwatch Alarms, and Lambda allowing the ability to failover based on custom Cloudwatch metrics resulting in less downtime
- Architected and deployed AWS infrastructure using Terraform templates and Jenkins pipelines. Developed Python scripts for automated provisioning, rehydration, and testing of deployments in AWS, while also remediating vulnerabilities across the team's infrastructure
- Created custom Grafana dashboard components using Typescript and React.js to monitor system health and status codes
- Provided mentorship to a group of interns, helping understand the ins and outs of the company as well as the use of company specific technologies

Software Engineer

Capital One, Richmond, VA, August 2021 to August 2022

- JavaScript, Typescript, Vue.js, HTML, CSS, AWS
- Redesigned UI for voice application enhancing voice application usability
- Improved back-end performance by migrating from Resitfy to Fastify achieving 50% faster requests
- Converted static application from AWS ECS to AWS Lambda resulting in cheaper hosting
- Implemented testing frameworks including Cypress, Jest, Mocha Chai, Sinon, and Vue Test Utils

Software Engineer in Training

Capital One, Richmond, VA, February 2021 to August 2021

- JavaScript, React.js, HTML, CSS, AWS
- Developed full stack application distributing AWS sandbox accounts to employees, streamlining internal workflows
- Designed and implemented cloud architecture to cleanse and create AWS accounts
- Collaborated within an agile development team

Finance Intern

Ampcus Incorporated, Chantilly, VA, June 2019 to August 2019

Project Experience

Resume Website (Cloud Resume Challenge)

- Integrated CI/CD workflows with Python unit testing and GitHub actions, streamlined infrastructure using AWS SAM, CloudFormation, and GitHub, and crafted a view counter utilizing HTML, CSS, JavaScript, Lambda, and DynamoDB

Uniswap Trading Bot

- Implemented a Python-based system leveraging Ethereum smart contracts to scan prices and execute trades, achieving a transaction speed increase and handling multiple simultaneous transactions

Additional Information

Technical Proficiencies: AWS, Git, HTML, CSS, JavaScript, Typescript, Vue.js, React.js, Python, Terraform, Jenkins, Docker
Certifications: Amazon Web Service Solutions Architect Associate