# MICHAEL RICHTER

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#### **EXPERIENCE**

### Capital One, Richmond, VA

August 2020 - Present

### **Software Engineer**

- Developing, testing, and deploying over 20 AWS Lambdas to perform data transformation, file delivery, and RESTful API calls
- Executing annual disaster recovery exercises for AWS EC2, Lambda, and RDS components across regions, ensuring system resilience and operational readiness
- Building a daily email report with a SQL script in Databricks to identify closed and charge-off credit cards
- Implementing additional endpoints in Java that enables API pagination of loan data
- Coding decryption of daily ZIP files using PGP keys on AWS Lambda for batch analytics processes on the enclosed files
- Utilizing DbSchema to analyze and load additional tables into a relational database
- Conducting API load tests using Apache JMeter to measure performance with Spring JDBC on a relational database
- Automating deployments of AWS S3 bucket configurations, policies, triggers across environments and regions for 15 buckets improving consistency and lowering maintenance efforts
- Eliminating a previously manual data transformation process by leveraging Pandas and Integrating an API for automated data uploads, improving accuracy and efficiency by 90%

#### OpenDSA, Blacksburg, VA

August 2019 - December 2019

#### **Undergraduate Research Assistant**

- Designed and developed data structure visualizations for an open-source textbook programmed in JavaScript
- Collaborated with a team of 7 to create a comprehensive textbook on programming language constructs, created for 200 students to use throughout the semester

Old Dominion Freight Line, Thomasville, NC

May 2019 – August 2019

#### **Software Engineer Intern**

- Developed 4 RESTful web services using Spring Boot in a microservices architecture
- Generated \$50,000 in daily revenue by marking loading zone codes on freight delivery
- Led integration and function testing by creating a mock service and produced over 50 test cases

Identity Management Services, Blacksburg, VA

October 2018 - May 2019

### **IMS Intern**

- Automated internal ServiceNow user form workflows using JavaScript, streamlining access management requests for over 30,000 Virginia Tech students
- Restructured user documentation for processing identity requests at Virginia Tech, improving clarity and reducing processing time by 50% for a team of 5 internal users

#### **EDUCATION**

Virginia Tech, Blacksburg, VA

May 2020

**Bachelor of Computer Science, Minor in Mathematics** 

## **SKILLS**

Languages: Python, Java, JavaScript, Bash, SQL

AWS: Lambda, EC2, RDS, SNS, S3, CloudWatch, Route53, IAM

Tools: Git, Jenkins, Docker, Postman/cURL, Unix, JIRA

Certification: AWS Certified Cloud Practitioner