James Rumsey

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EDUCATION

Duke University Durham, NC

May 2021 (Expected) B.S. in Computer Science Minor in Statistical Science GPA: 3.75/4.00

SKILLS

Programming

Working Knowledge:
Java, Python, JavaScript
Basic Knowledge:
R, HTML/CSS, Swift, C

Technologies & Frameworks

Git, AWS (Lambda, Config, DynamoDB), Jenkins, Terraform, SQL, NoSQL, Vue.js

RELEVANT COURSEWORK

- Software Design & Implementation
- Data Structures & Algorithms
- Database Systems
- Operating Systems (In Progress)
- Computer Architecture
- Algorithm Design & Analysis
- Discrete Mathematics
- Intro. Mobile Programming
- Machine Learning
- Probability & Mathematical Statistics
- Regression Analysis
- Calculus & Linear Algebra

WORK EXPERIENCE

Capital One - Software Engineer Intern

June 2020 – August 2020 I New York, NY (Moved to Remote) Retail & Direct Technology, Site Reliability Engineering

- Worked on a resiliency compliance detective application that gives insights into the resiliency posture of all retail bank applications
- Created custom AWS Config rules with Terraform, wrote AWS
 Lambda functions with Python to evaluate applications' compliance with cloud best practices, and configured the project's CI/CD pipeline to facilitate the addition of more rules
- Improved bank's resiliency efforts by flagging 1000+ resources as non-compliant with established best practices for AWS services (EC2 Auto Scaling, DynamoDB, RDS)

Duke University – Computer Science & Statistics Peer Tutor (Head Tutor)

August 2018 – Present I Durham, NC Duke Academic Resource Center

- Conduct weekly group tutorials for Data Structures & Algorithms course (CS 201) and Intro to Data Science (STA 199)
- Supervise a team of 10-15 tutors, serve as a point of contact between the Academic Resource Center and course instructors to improve tutoring strategies and instruction content

IBM - Software Developer Intern

May 2019 – September 2019 I Research Triangle Park, NC Chief Information Office

- Implemented an IoT solution for monitoring occupancy of phone and conference rooms in IBM workspaces currently being piloted at the RTP campus
- Developed front-end dashboard using Vue.js, created service layer and wrote REST API endpoints for database connection with Node.js, and deployed app to IBM Cloud

PROJECTS

OOGA (Object-Oriented Game Architecture) Monopoly

March 2020 - May 2020 | Duke University

Developed the front-end and data management APIs for a data-driven game using the MVC pattern as part of a 4-person group project (Java)

Thyroid Cancer Pathology with Deep Learning

January 2019 - May 2019 | Duke University

Research project on improving thyroid cell malignancy prediction with convolutional neural networks; used a dataset of regions of interest from thyroid scans from the Duke Health System with goal of determining the most efficient resolution for further training and testing (Python PyTorch, Pandas, NumPy)

Duke Research Hub Web App

September 2018 – December 2018 I Duke University Developed a REST API and designed relational database schema for an application meant to connect Duke undergraduates to faculty doing research as part of a 5-person group project (Python Flask, Postgres)