

# 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 | 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 Groups, DynamoDB, RDS)

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

August 2018 – Present | 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 | 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 | 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)