

# Keaton Martin

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## EDUCATION

### University of Kentucky

*B.S. in Computer Science, Minor in French; Cumulative GPA: 3.97*

Lexington, KY

August 2021 – May 2025

## EXPERIENCE

### Software Engineering Intern

*Capital One*

June 2024 - August 2024

*McLean, VA*

- Led API development on an internal production support dashboard.
- Programmatically related several data entities in Snowflake production tables using SQL to provide more context on HTTP error codes.
- Parallelized API calls using JavaScript promises to speed up loading time of a web app.

### Software Engineering Intern

*84.51°*

May 2023 - August 2023

*Cincinnati, OH*

- Simplified a system architecture by rewriting an existing Java service from scratch in Go.
- Increased throughput of a service by more than a factor of 2 by parallelizing uploads to a content management system
- Implemented communication between services with both REST and event-driven messaging-based architectures using RabbitMQ
- Sped up development speed by writing a GitHub Workflow to automatically fetch the latest build tag to deploy to a Kubernetes cluster.

### Undergraduate Teaching Assistant

*University of Kentucky*

August 2023 - Present

*Lexington, KY*

- Led and taught a lab section of CS216, Introduction to Software Engineering Techniques. Responsible for grading assignments, holding office hours, answering questions about course material.
- Teaching assistant for CS485, Introduction to Competitive Programming. Responsible for selecting algorithmic topics, problems, and preparing solutions. Gave lectures on topics like string hashing, dynamic programming, and greedy algorithms.
- Undergraduate teaching assistant for CS315, Introduction to Algorithms. Responsible for grading written student assignments.

## PROJECTS

### UKY Dining Hall App | *Python, React Native, AWS Lambda*

August 2022 – December 2022

- Enabled students at the University of Kentucky to view dining hall menus on their phone by developing a mobile-app that displays breakfast, lunch, and dinner.
- Reduced cost dramatically by adding a caching layer in front of the back-end using AWS CloudFront
- Wrote and deployed a RESTful API on a serverless architecture using AWS Lambda and API Gateway.

### Cross-stitch Pattern Generator | *React Native, Python, Machine Learning, Git*

April 2023

- Built a full-stack mobile app that uses machine learning to generate cross-stitch patterns.
- Deployed an endpoint on Google Cloud Functions that trains a k-means clustering model on an image in the request payload.
- Received first place at CatHacks, an annual hackathon at the University of Kentucky.

## TECHNICAL SKILLS

**Languages:** Go, Python, Java, C, C++, JavaScript, HTML/CSS

**Frameworks:** Spring/Spring Boot, FastAPI, React/React Native, Node.js, Angular

**Developer Tools:** Git, Unix, Kubernetes, Docker, L<sup>A</sup>T<sub>E</sub>X, GitHub Actions, Azure

**Libraries:** pandas, NumPy, Matplotlib, scikit-learn, Mockito, JUnit

## RELEVANT COURSEWORK

Graduate Data Structures and Algorithms, Graph Theory, Artificial Intelligence, Databases, Networking, Linear Algebra, Data Science, Automata Theory, Computer Graphics, Discrete Math, Differential Equations, Systems Programming