

Kyle Poage

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Education

University of Wisconsin-Madison B.S. Computer Science, B.S. Economics, Certificate in Mathematics	May 2026 3.83 GPA
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Relevant Coursework:

Operating Systems, Computer Networks, Database Management, Algorithms, Machine Organization, User Interfaces, Data Analytics, Linear Algebra, Combinatorics, Econometrics, Game Theory, Probability Theory

Relevant Experience

Software Engineer (Capstone Project) Capital One	Jan 2026 - Present Madison, WI
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- Designing and deploying a cloud-native, event-driven fraud detection system on AWS to enable real-time transaction scoring and automated customer fraud alerts
- Developing a supervised machine learning model to generate calibrated 0–1 fraud risk scores while minimizing false positives and false negatives
- Implementing RESTful APIs to simulate transaction ingestion and enable end-to-end model evaluation

Software Engineering Intern Whova, Inc.	May 2025 - Aug 2025 San Diego, CA
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- Owned the end-to-end development of a Related Conference Leads Dashboard, building full-stack internal tools using Django and React to centralize conference lead data for Sales
- Designed RESTful APIs with Django Rest Framework handling authentication, pagination, and business logic for internal tools used across multiple teams
- Built an automated Gmail API ingestion pipeline to process ~100+ inbound emails per week, creating structured leads in the database and eliminating manual entry for the Marketing team
- Identified performance bottlenecks in Django ORM queries to improve dashboard responsiveness and scalability

Undergraduate Teaching Assistant UW-Madison	Sep 2024 - May 2025 Madison, WI
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- Held weekly office hours to assist over 600+ Programming III students with debugging, code structuring, and conceptual explanations in Java
- Guided students through debugging complex Java programs, emphasizing independent problem-solving and structured debugging strategies
- Supported students in configuring and troubleshooting Java development environments on GCP virtual machines

Projects

WSH - Custom Unix Shell C, POSIX, Linux	Sep 2025 - Oct 2025
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- Implemented multi-stage pipeline execution using fork, execv, dup2, and UNIX pipes, enabling concurrent interprocess communication across 120+ chained commands
- Developed built-in commands, PATH resolution, and dynamic data structures (hash maps for aliases, dynamic arrays for history) to support flexible command execution and persistent shell state

TEL Real Estate Python, Flask, React	Feb 2025 - Apr 2025
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- Implemented a full-stack accessibility verification platform using Flask and React to validate short-term rental compliance
- Designed RESTful APIs in Flask to manage rental listings and validation workflows

Poker Emulator Node.js, WebSockets, JavaScript	Jun 2024 - Feb 2025
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- Created a poker game using Node.js and WebSockets to concurrently play with friends online
- Implemented game logic and backend using JavaScript with an HTML and CSS frontend

Technical Skills:

Languages: Java, Python, C/C++, JavaScript, SQL

Frameworks & Libraries: React, Django, Flask, Node.js, Redux

Tools: AWS, Docker, Git, UNIX/Linux