Steven Hudson

Software Engineer

steven.g.hudson@gmail.com (334) 750-6216

Technical Skills

Programming Languages	Python, Java, SQL, Plpgsql, Javascript/TypeScript, C/C++, C#
Frameworks & Libraries	Django, React, Quarkus, Pytest, JUnit
Dev Tools	Git, Jira, VSCode, IntelliJ, Vim, Bash, Slack
Cloud & DevOps	Azure, Docker, Azure EventHubs

Experience

Software Engineer, General Motors - Austin, TX Jan 2022 - Aug 2025

Virtual Power Plant

- Designed and developed electric vehicle charging platform to support managed charging and responsiveness to grid power demand in collaboration with utility partners
- Reduced enrollment latency by over 80% by leveraging Postgres functions and Azure EventHubs
- Drove adoption of unit testing with Pytest by leveraging Copilot to increase code coverage of one microservice from 0% to nearly 90% in a single sprint, later shifting to test-driven development

Home Charging Installation

- Improved app reliability by using Java debugger to identify blocking calls in asynchronous Quarkus, changing to non-blocking I/O to eliminate deadlocks
- Increased efficiency of customer support by identifying common failure modes from support tickets and impemented features to enable representatives to resolve issues without escalation

General Manager, American Multi-Cinema - Auburn, AL Sep 2015 - Mar 2020

- Improved integration of interactive pre-show pilot by reverse-engineering library management system and added application to remove packages without risk of orphaned assets
- Minimized downtime by troubleshooting digital projection hardware and software
- Opened new market by bringing foreign films to our theatre in collaboration with local student group
- One of only 27 US theatres to open The Wandering Earth, China's highest-grossing film at the time

Education

B.S. Software Engineering May 2021
Arizona State University, Tempe, AZ 3.77/4.00 GPA
Dean's List: Fall 2020, Spring 2021 Magna Cum Laude

Projects

Galactic Waez Oct 2021

- Problem: Empyrion lets players explore a galaxy of tens of thousands of star systems, but does not provide wayfinding. Further, galaxy map is not exposed by the game's modding API.
- Solution: Developed a heuristic to identify galaxy map data within application memory, then used that data to build a graph structure and implemented A* pathfinding to optimize navigation.

Performance Scheduler Jan 2020

- Problem: Scheduling performances is a time-consuming task involving many constraints, and the only company-provided tool was a spreadsheet.
- Solution: Designed and developed a desktop Java application with custom swing components to facilitate scheduling with an intuitive, drag-and-drop interface.