Steven Hudson [in]

Software Engineer

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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
- Increased revenue by opening new market by bringing foreign films to our theatre in collaboration with local student group

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.