

Technologies and Languages

- Languages: Java, Python, C#, Rust, C++, TypeScript, Swift, Bash, PowerShell, VBA, MATLAB
- Technologies: Git, MySQL, Docker, Postgres, React Native, Expo, AWS, MongoDB, Redis, Gradle, Maven, CMake

Work Experience

Software Engineer 1	Dell Technologies	Jan 2024 – Present
Dell Optimizer Team	Austin, TX	
<ul style="list-style-type: none">• Worked on in house AI based automatic remediation of extremely common IT problems, saving the company \$25-40 million in user support costs per year. Used C# to interface with Windows APIs• Collaborated with Industry AI leader on integrating solutions for easily accessible step-by-step user troubleshooting, to help millions of users with daily PC usage, as well as circumvention of issues, with the potential of further saving \$5-15 million in support costs• Supported the Dell Optimizer product by updating the C# codebase to more modern and performant SDKs and APIs, and merging duplicated features and codebases into one streamlined solution to improve development team performance• Supported interns on several projects, guiding them with troubleshooting, debugging, code reviews, and overall integration into the company		
Software Engineering Intern	Dell Technologies	May 2023 – Aug 2023
<ul style="list-style-type: none">• Developed an improved authentication workflow for controlled access to critical servers using windows services/daemons• Utilized Windows Server API in C# to implement authentication protocol, using ASP.NET for server communication, with Blazor & Maui for User Interface		
Software Specialist	P&R Software	Dec 2020 – Apr 2023
	<i>preciouso.com/portfolio</i>	
<ul style="list-style-type: none">• Conducted server maintenance and resolved issues, improving system reliability and performance• Created software to track crypto markets & transactions, enabling analysis for where value was being created• Created Java-based Minecraft mods and plugins to enhance gameplay and add custom features• Gave clients direction regarding software scope, architecture, and timelines of software and app proposals		

Education and Certifications

B.Sc. Computer Science, Wichita State University, Wichita, KS.	Dec 2023
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Projects

EventSnap

- Created an app that uses AI to convert images into iCloud/Google Calendar events
- Used SwiftUI on the frontend to create an intuitive UI, and FastAPI on the backend for speed and simplicity

QueuePreview

- Developed an app that helped over 1.5k students prioritize and keep track of companies present at the 49th NSBE convention, resulting in increased student engagement and efficient company interaction.
- Used React Native to build a user-friendly UI, allowing users narrow down career opportunities more efficiently
- Deployed a backend service in Python using FastAPI and Postgres, utilizing GitHub Actions and fly.io for a smooth deployment process

PC-Remote

- Designed a cross platform, universal app to allow a user to control their computer using their mobile device
- Implemented a custom protocol to allow touchpad input or gyroscope data to be sent over LAN, allowing the PC cursor location to be updated in real time

SQLite-Lite

- Recreating the base functionality of SQLite in Rust

AES_128_CBC_Bruteforce

- POC of brute force to determine the key to an AES encrypted blob, given plaintext & iv