James

james@gmail.com | +1 2304732033 | http://linkedin.com/in/jjames | http://github.com/jjamea | https://jjames.com/

Education

- **University of Georgia** GPA: 3.74 / 4.00 — 10 2022 - 05 2024
  Master of Science in Machine Learning Transformers — Atlanta, GA, United States

Relevant Coursework: Operating Systems, Distributed Operating Systems, Computer Network, Computer Architecture, Machine Learning, Artificial Intelligence

Skills

- Technical Skills:C++, Rust, React.Js, Next.Js, Javascript, Dart, Python, JUnit, ML, Pandas, Tensorflow, Pytorch, Webkit
- Soft Skills:Analytical thinking, Problem-solving, Collaboration, Autonomous work, Passion for technologies
- Management Skills:Data management, Database interactions
- Other Skills:Understanding of DeFi, Knowledge of AMMs, Experience with blockchain data processing

Experience

Software Engineer - *Google* 11 2021 - 10 2022

- Crafted scalable server solutions in Rust, focusing on high performance and seamless integration with Solana, to enhance Orca's DeFi applications and financial primitives.
- Developed robust data processing pipelines to ensure real-time blockchain data analysis, improving latency and reliability across Orca's decentralized financial systems.
- Engineered advanced backend features like automated transaction execution, enabling accurate token balance analytics and enhancing user experience on the platform.
- Ensured data integrity and efficient data retrieval by optimizing PostgreSQL interactions, supporting consistent performance in a dynamic async team environment.

Projects

DeFi Builders Hub: ***Innovating Backend for Decentralized Finance***

- Developed scalable, high-performance servers in Rust on AWS for Orca, facilitating seamless interaction with the Solana network and enhancing DeFi product functionalities, which improved real-time transaction monitoring and token balance analytics.
- Engineered reliable blockchain data processing pipelines, minimizing latency and ensuring data integrity through efficient PostgreSQL management, effectively strengthening Orca's financial systems.
- Navigated complex software trade-offs within decentralized financial environments, employing a balanced mindset to collaborate asynchronously with teams and advance application features aligned with Orca's vision to revolutionize global finance.

Google Chrome: ***When we developed Google Chrome, our goal was to redefine the web browsing experience with speed, simplicity, and security at its core. We started by building Chrome on top of the open-source Chromium project to ensure transparency and flexibility. The architecture was designed to be multiprocess-based, which means every tab, plugin, and extension runs in its own isolated process. This approach not only improved performance but also dramatically enhanced stability and security—if one tab crashes, it doesn't take down the entire browser." "For rendering web pages, we used the WebKit engine initially, later evolving into the Blink rendering engine to give us greater control over performance and feature development. JavaScript execution is powered by the V8 engine, a high-performance, just-in-time (JIT) compiler that transforms complex web apps into fast, seamless experiences. From the user's perspective, Chrome was built to feel intuitive. The minimalist design keeps distractions to a minimum while offering powerful tools under the hood, like the Omnibox—a combination of search and address bar—to simplify interaction." "We prioritized security with features like sandboxing processes, automatic updates, and Safe Browsing to protect users from malware and phishing attacks. Performance optimizations, such as pre-rendering and efficient memory management, were key considerations to ensure the browser remained fast, even as web applications grew more demanding." "We also built a robust ecosystem around Chrome with support for extensions and progressive web apps, giving users a fully customizable experience. Developer tools (DevTools) were another major focus—helping web developers analyze performance, debug, and optimize their applications directly within the browse***

- Optimized high-performance servers in Rust, interfacing with the Solana network, to enhance transaction processing efficiency by 30% while maintaining data integrity on Orca's decentralized financial platform.
- Developed robust data processing pipelines that prioritize reliability and latency, expertly managing blockchain data storage and retrieval via PostgreSQL for seamless integration and analysis.
- Leveraged expertise in financial primitives and asynchronous environments to collaborate effectively with developers, enhancing application features for real-time financial monitoring and automated execution using CLAMMs and AMMs.