William Parker

San José, CA | wiparker2020@gmail.com | Personal Website | GitHub | LinkedIn

EDUCATION

San José State University | San José, CA
- Master of Science in Artificial Intelligence | May 2025
- Specialization in Data Science
- Wrote thesis on training a multi-task model for pose detection with facial recognition using PyTorch and combining state of the art solutions for targeted pose detection of predefined subjects in a scene.

Southern New Hampshire University | Manchester, NH
- Bachelor of Science in Computer Science | May 2023
- Concentration in Machine Learning | Minor in Applied Mathematics
- GPA: 3.88 | Summa Cum Laude | President's List

TECHNICAL SKILLS

Languages: TypeScript, Dart, Python, Modern C++, Java, Swift, C#, R, HTML, CSS, XML, SQL
Operating Systems: Android, iOS, Mac, Android Auto, Windows, UNIX/Linux
Tools & Frameworks: Git, CMake, AWS, REST APIs, React, Flutter, Deno, PyTorch, WXT, Redis, Docker, CI/CD
Methodologies: Agile, Scrum, Kanban, Clean Architecture

WORK EXPERIENCE

Backend Developer Volunteer | Inclusive World | San José, CA | February 2025 - Present
- Developed modern backend infrastructure using Next.js, TypeScript, and Supabase.
- Collaborated with Mozilla and Meta engineers to deliver highly efficient and maintainable systems.
- Implemented industry standard techniques such as CI/CD and agile methodologies.

Independent Developer | FreeMoveVR | September 2022 – February 2025
- Created FreeMoveVR, an innovative VR body-tracking application suite that uses mobile and desktop cameras to estimate body positions in real-time, enhancing user immersion.
- Built a cross-platform mobile application using Flutter with state-of-the-art pose detection processing.
- Optimized mobile app performance and messaging speed, providing low latency and efficient data transfer allowing for real-time body tracking and seamless VR interactions.
- Developed public libraries integrating Android and iOS APIs and libraries using Kotlin and Swift to create open-source libraries for BLE peripherals (GitHub, Blog Post) and Pose Estimation (GitHub, Blog Post).

Android Engineer Intern | Arity | Remote | June 2022 - August 2022
- Implemented pay per mile features into the mobile app using Kotlin, Android Jetpack, and REST APIs.
- Pioneered the development of an Android Auto app for end users to be installed in their cars and developed secure data transfer integration between the car app and their mobile app, enhancing UX and data security.
- Prototyped alternative odometer reading methods, delivering actionable technical solutions for the team.
- Collaborated to design dynamic UI components, improving user interactions using industry standards.

SOFTWARE PROJECTS

Pocket LLM
- Developed a cross-platform LLM chat app using ByteDance's Lynx, targeting Android/iOS.
- Integrated real-time LLM API calls across a variety of services (GitHub).

Chord Llama
- Fine-tuned Llama 3 8B on MusicXML, training it to continue musical pieces.
- Optimized using first principles, reworked MusicXML from scratch to YAML format to fit in 4k token limit.
- Worked with modern ML tools to format model for inference and quantized to run on everyday computers.
- Links: GitHub, Hugging Face, Ollama, Blog Post

COMMUNITY INVOLVEMENT

- Served as Vice President of the SNHU Computer Science Student Association, organizing events and fostering a collaborative environment for aspiring developers.
- Eagle Scout Boy Scouts of America Litchfield Troop 11 2019.