Bryan Rhoelle Bergenholtz

brbergenholtz.19@gmail.com | (562) 316-9385 | linkedin.com/in/bryanbergenholtz/ | github.com/YanRho

EDUCATION

California State University - Long Beach
B.S. in Computer Science, May 2025

EXPERIENCE

Terravan Solar   **June 2023 - May 2024**
Software Engineer Intern
- Developed embedded system features for battery connectivity using USB serial communication with android devices.
- Optimized C++ libraries (e.g Jbd Library) to improve communication with Arduino ESP32.
- Collaborated in Agile workflows with fellow engineers to deliver production-ready features on tight timelines.
- Practiced code debugging, version control, and iterative development.

PROJECTS

Solar System Diorama - Computer Graphics Project   **May 2025**
Software Developer
- Built an interactive 3D solar system simulation using Modern OpenGL (3.3+) in C++.
- Implemented lighting, and camera controls (orbit and zoom) for immersive user experience.
- Integrated Assimp for loading 3D planet models and GLSL shaders for accurate perspective rendering.

Budget & Expense Tracker   **March 2025**
Software Developer
- Designed and developed a cross-platform personal finance tracker using React Native (with Expo) for iOS and FastAPI backend with MongoDB.
- Implemented CSV import functionality to allow users to bulk upload transaction data.
- Used Pandas to generate insights such as spending trends, category breakdowns, and budget summaries.
- Developed an intuitive UI for adding, editing, and visualizing expenses across categories like food, bills, and transportation.
- Focused on a privacy-first design with local and secure cloud-based storage options.

SRB Construction and Engineering Services Website   **June 2024 - January 2025**
Software Developer
- Developed and deployed a responsive business website using Next.js and Tailwind CSS to enhance the company's digital presence.
- Collaborated directly with the client to gather technical and design requirements, translating business needs into a user-friendly web experience.
- Conducted iterative user testing and feedback sessions, refining UI/UX to boost usability and engagement.

Full Stack Messaging Web App - CSULB Senior Project   **January 2024 - December 2024**
Software Developer
- Developed a real-time messaging platform with file sharing and authentication.
- Integrated PostgreSQL using NeonDB for scalable, cloud-based storage and retrieval.
- Leveraged Restful APIs and Next.js for seamless front-end/back-end interaction.
- Worked in an Agile SCRUM team of five, using Jira to track deliverables and milestones.

TECHNICAL SKILLS

Programming Languages: JavaScript, Python, C++, C#, HTML, CSS
Frameworks: React, Next.js, ASP .NET, Tailwind CSS, Node.js, React Native
Graphics & Systems: OpenGL, GLSL, Assimp, GLFW, Modern C++
Databases: SQL, PostgreSQL, MongoDB
Tools: Figma, VsCode, Jira, Git