Seven Flaminiano

Long Beach, CA
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Education

University of California, San Diego — San Diego, CA
Bachelor of Science, Computer Science • GPA: 3.84/4.00 — *2025 – Expected June 2029*

- **Relevant Coursework:** Advanced Data Structures, Design and Analysis of Algorithms, Systems Programming, Linear Algebra, Computer Organization

Experience

Software Engineer Intern — Jul 2026 to Sept 2026
Aerogentic — *Remote*

- Migrated in-house user login system and accounts to Firebase and Cloud Identity
- Built a pipeline that seeds local dev databases with staging data, replacing thin default fixtures
- Prototyped SSO with domain routing for registered organizations

Projects

Synora Game Engine | *C++, OpenGL, entt, Jolt, assimp, Dear ImGui, Tracy* — 2026 – Present

- Architected a C++/OpenGL renderer with its own resource and handle management behind a scene-level, API-agnostic interface designed for additional backends, with PBR/IBL and cascaded shadow maps
- Rewrote the asset manager (runtime-registered asset types and loaders) and built scene, entity, and input systems

Doodle Derby | *Typescript, SolidJS, PlayroomKit* — 2026

- Designed the multiplayer state model on PlayroomKit and built the gameplay loop (prompts, rounds, scoring)
- Built undo/redo with the command pattern and synced canvas state across clients using deltas and periodic snapshots to keep players consistent
- Led a SolidJS rewrite for a 16-person team, replacing HTML-injected page switching and one-off UI with reusable components that let teammates build UI layouts faster

Galaxy Stride | *C++, raylib, Bullet Physics, PhysFS, tinygltf* — 2023

- Developed an in-game level editor allowing asset placement and in-place playtesting, used to author 5 levels
- Coded a character controller supporting crouching, slide jumping, and velocity-scaled FOV for speed feedback
- Programmed a model loader on top of tinygltf to import static vertex-colored meshes, and wrote a skybox shader, since raylib's 3D support was limited

Activities

Video Game Development Club — 2026 – Present
Tech Officer

- Contributing to website overhaul, helping officers manage events, posts, and profiles
- Implemented gameplay logic for T-Rex-style runner game displayed on the overhauled club website's hero page

Triton Astronautics Research Systems Group — 2025 – Present
Avionics Team – On-Board Computing

- Independently developed both telemetry loggers and coordinated with hardware team by providing pinout requirements for PCB integration
- Led a workshop teaching ESP32 embedded development to new club members

Technical Skills

Languages: C/C++, JavaScript/TypeScript, Rust
Frameworks: React, Node.js, SolidJS
Developer Tools: Git, CMake, GDB, Valgrind, Tracy Profiler, RenderDoc, Linux, Google Cloud Platform
Other: OpenGL, CUDA, GLSL, Slang