Akeli Adilijiang

Computer Science Student

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GitHub: Akil0814
Portfolio: akil0814.github.io

SUMMARY

Computer Science student focused on C++ software engineering, developing modular applications and games using SDL, Qt, OpenGL, and SQLite. Comfortable with modern C++ (C++11/17), CMake, and Linux environments (CLI workflows, basic networking, firewall configuration). Familiar with applying design patterns to improve maintainability. Interested in C++ backend and graphics-oriented engineering.

TECHNICAL SKILLS

Programming Languages: C++, C, Python, SQL, GLSL, HTML, CSS, JavaScript

Graphics: OpenGL (GLFW, GLAD), SDL2/SDL3

Data: SQLite, cJSON

Tools: Git/GitHub, CMake, vcpkg, Visual Studio, MinGW, VSCode

Platforms: Windows, Linux

Concepts: OOP, scene/state management, data persistence, defensive programming, debugging

Languages: English(fluent), Chinese(native), Japanese(basic)

PROJECTS

WarShip (C++ / SDL) | Overview

- Designed a modular architecture separating input, update, rendering, and state management to improve maintainability.
- Implemented asset/resource pooling and object pooling for scene entities to reduce repeated loading and runtime allocations.
- Built a callback-driven VFX/animation system and entity factories to keep gameplay logic decoupled.

College Tour App (Qt / SQLite) | Overview

- Contributed to backend development in a team-based Qt + SQLite application.
- Implemented centralized SQLite CRUD logic and transaction-based recovery (rebuild/rollback) for import reliability.
- Designed a lightweight local credential validation system for admin authentication.

Minesweeper (C++/EasyX) | Overview

- Built a scene/state manager enabling clean menu/settings/gameplay transitions and modular features.
- Implemented layered grid state with recursive auto-expansion, plus modes, timer, fast restart, and first-click safety.

8-bit CPU / Digital Logic Build (74xx TTL) | Overview

- Designed and wired CPU-style modules on breadboard using 74-series TTL logic (registers, adders, buffers).
- Designed a 16×8 memory architecture with dedicated address register and program counter for instruction sequencing.

Personal Portfolio Website (GitHub Pages) | akil0814.github.io

- Responsive portfolio with theming and interactive UI elements.
- GitHub Actions pipeline for stable generated assets.

EDUCATION

Saddleback College | Computer Science (in progress) | GPA: 3.9

Relevant Coursework: Data Structures, Physics (E&M), Linear Algebra, Calculus

Expected Graduation/Transfer: 9/2026

JOB EXPERIENCE

UPS Preload — September 2023 – August 2025

- Managed high-volume package sorting under strict time constraints in early-morning operations while maintaining accuracy.
- Balanced full-time coursework with consistent shift responsibilities, demonstrating reliability and time management.

Saddleback College – CARE Corner Assistant — October 2025 – Present

- Supported students with resource coordination and administrative tasks in a service-oriented campus environment.
- Communicated clearly with diverse students and maintained accurate documentation.

ACTIVITIES

CES – Exhibitor | Las Vegas, NV | 2026

- Presented product demos and communicated features and technical highlights to attendees.