### Jacob Kelleran

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California Polytechnic State University, San Luis Obispo, CA Graduating June 2026 (Expected) GPA: 3.8/4.0 major; 3.7/4.0 overall Blended B.S. + M.S. in Computer Science

### **RELEVANT COURSEWORK**

Deep Learning **Operating Systems** Systems Programming

Software Engineering Adv. Algorithm Analysis Adv. Programming Languages

**Object-Oriented Programming Databases** Artificial Intelligence

### **SKILLS**

Python (NumPy, Matplotlib), JavaScript/TypeScript (Node, React, Express, SvelteKit), HTML/CSS, Java, Rust (Bevy, Tauri), C, GLSL Shaders, C++, C# (ASP.NET, Unity), F#, Racket, ARM Assembly, SQL, MongoDB, Firebase, AWS, Azure, REST, Unix, Git, CI/CD, ChatGPT, ClaudeCode, Adobe, Microsoft Office

# PORTFOLIO HIGHLIGHTS (AVAILABLE AT EMUMAN.NET)

- Portfolio (emuman.net) HTML/JavaScript/CSS, Python/Flask
- Game Portfolio (emuman.net/games) Unity, Godot, Bevy
- GPU Black Hole Rasterizer C++, GLSL, Python
  - Built a GPU application that properly rasterizes black holes using the Schwarzschild Metric.
  - o BVP solved by SciPy in Python, baked info used as 3D texture for geometry distortion in vertex shader.
- Blender Face Shader Addon Python
  - Utilizes Blender's Python API to generate smooth cel shading for characters without external tools.
  - Includes high-performance multiprocessing, spatial transformations, and custom serialization.
- Cal Poly Esports Website (calpolyesports.com) SvelteKit, MongoDB (full stack)
  - Built from the ground up for the council, hosted on Azure/MongoDB Atlas, with full CI/CD support.
  - Features administrator authentication, easy club management tools, and visually cohesive displays.

## **WORK EXPERIENCE**

California Polytechnic State University, San Luis Obispo, CA

September 2025 – Present

- Office of Writing and Learning Graduate Assistant
  - Handle and analyze data describing required tutoring for athletics and other tutoring statistics.
  - Work with other staff to extract valuable information and create tools to optimize workflow.

Vetco Electronics, Bellevue, WA

June 2025 – September 2025

**Business and Website Management** 

- Programatically analyzed data from the store website to visualize product line and SEO-optimize descriptions.
- Updated photos and breakdowns on the store website, answered customer questions, worked cash registers.

California Polytechnic State University, San Luis Obispo, CA

September 2022 – March 2025

Computer Science Peer Tutor (September 2022 – December 2024)

Lab Assistant and Grader (January 2022 – June 2023, January 2025 – March 2025)

- Gained experience working with others and viewing problems from different points of view.
- Helped solidify concepts and gained new understanding of fundamentals.

#### **HONORS & ACTIVITIES**

| President – Cal Poly Game Development Club                          | 2024 – Present        |
|---|-----------------------|
| Treasurer – Cal Poly Esports  | 2024 – 2025           |
| <ul> <li>Japanese Student Association Club Band (Genkey)</li> </ul> | 2024 – 2025           |
| <ul> <li>Media Coordinator – Cal Poly Overwatch Club</li> </ul>     | 2023 – 2025           |
| - Dragidant's Hanar List  | 2024 2022 / 2022 2024 |

2021-2022 / 2023-2024 President's Honor List