

ALDO ACEVEDO

Software Engineer and Computer Engineering Student

I. RESEARCH INTERESTS

Reinforcement learning, mechanistic interpretability, AI alignment.

II. EXPERIENCE

Neptune School Dec 2023 – Jun 2024

Computer Graphics Engineer ... Rust, WebAssembly, WebGPU, TypeScript

Worked with an educational game engine’s internals. Designed and implemented:

- Chunked terrain system with vegetation and water.
- 3D-to-spritesheet rendering of characters to improve animation performance.
- Automatic background pre-rendering system, allowing game to run on low-end devices.

Freelance May 2022 – Sep 2022

Software Engineer ... Rust, WebAssembly, TypeScript, XHTML, EPUB, WebGL, GLTF

- Created tool to convert Kindle highlights into book summary. Implemented parser and EPUB exporter.
- Web-based GLTF scene viewer using WebGL and WebAssembly. Created a custom graphics engine for this purpose.

Posibillian Tech

Software Engineer ... Unity, C#, PostgreSQL Nov 2021 – Feb 2022

Optimized memory usage for Points of Interest (POI) in Cubie World and created dev tools for POI design and queries.

Lead Software Engineer ... Unity, C# Nov 2020 – Mar 2021

Built physics engine, gameplay mechanics, procedural animation and level design tools of platformer video game.

III. EDUCATION

National Taiwan University of Science and Technology 2025 – 2026

B.S. in Computer Engineering (3-semester exchange)

Courses taken: Deep Learning Architecture and Applications, Parallel and Distributed Computing

Universidad Politécnica Taiwán-Paraguay 2023 – 2026

B.S. in Computer Engineering, GPA: 4.56/5.00

Colegio Técnico Nacional de Asunción 2020 – 2022

Technical High School Diploma on Information Technology, GPA: 4.94/5.00

IV. PERSONAL EXPERIENCE

Machine learning projects (PyTorch) 2023-present

- [Fast parallel deep reinforcement learning from-scratch in C++, 200x speedup from Python version.](#)
- [Explainer blogpost showcasing feature visualization research, with step-by-step replication.](#)
- Replaced FastComposer (Xiao et al., 2023) backbone with tiny-sd for 1.5x speedup, 11x size reduction
- Music genre classification with CNN architecture on the GTZAN dataset. 99% accuracy.

Creator and maintainer of free open-source software (Rust, D-Bus, WINAPI, TypeScript) 2021-present

- [souvlaki\(108 ★\)](#): cross-platform Rust library for handling OS media controls and metadata. Supports Linux, BSD, macOS/iOS, Windows.
- [obsidian-helix\(99 ★\)](#): Obsidian.md plugin that implements Helix keybindings in the editor.

Music production and composition, Aldo Acevedo, Sinono3, Blanketernal (Ableton, Max/MSP, FL Studio) 2017-present

Math and programming tutor, DevSquad, Pino Code, Colegio Técnico Nacional 2020-2023

Game developer Designed, painted, 3D-modelled, programmed, composed and wrote horror, rhythm, and simulation games in my independent studio. 2014-2022

V. AWARDS AND HONORS

1st place in Aguarandu (Paraguay programming competition)	2019, 2020, 2021
Silver medals at OMAPA (Paraguay math olympiad)	2018, 2019, 2020
2nd place at IEEEExtreme (24-hour programming competition)	2023, 2024
1st place at FACEN National Math Competition	2022

VI. LICENSES AND CERTIFICATIONS

AI Safety Fundamentals: Alignment	Debated topics in AI alignment during weekly sessions.	2024
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VII. TECHNICAL SKILLS

Experienced	Rust, C#, Python
Comfortable	C, C++, Shell/Bash, Nushell
Acquainted	SQL, Julia, JavaScript, TypeScript, Java, PHP, Verilog, Lua, BQN
Tools/Libraries	PyTorch, Transformers, WebGPU, OpenGL, SFML, Makefile
Game Engines	Unity, Godot, Bevy, Love2D, MonoGame/XNA
Operating Systems	Linux (Arch, Void, Debian), macOS, Windows

VIII. REFERENCES

Stuart Reavley, CEO, Neptune School	stuart@juneau.io
Juan Eduardo de Urza, CEO, Posibillian Tech	jeuazarru@gmail.com