

Aurora Berta-Oldham

GA, USA | contact@aurorabertaoldham.com | aurorabertaoldham.com

Experience

Apple Inc.

Firmware Security Engineer

August 2021 - Present

Beacon Games LLC

Chief Executive Officer and Game Developer

May 2016 - August 2021

- Engine programmer, gameplay programmer, UI programmer and designer, pixel artist, story and dialogue writer, and world designer for the game Everchanging.
- Designer of the company's website.
- Manager of the social media accounts and marketing.
- Graphic designer for both the company's and Everchanging's branding assets.

Projects

Everchanging

A city-building RPG that I developed for five years at my studio, Beacon Games. It is powered by my custom game engine called the EvEngine. The game was canceled in August 2021 after joining Apple Inc. It was originally going to launch on the game store Steam near the end of 2021 for PC.

EvEngine

A 2D C# game engine I developed for Everchanging at Beacon Games. It uses D3D11 for rendering and XAudio2 for audio on Windows but formerly used OpenGL and OpenAL in early versions. The engine includes localization supports, a renderer with lighting and dynamic batching, a GUI system, an asset management system, and an audio system with streaming from disk support.

Verdure OS

An open-source operating system that I was writing in Rust. It was still very early in development, but I had plans to have a full desktop environment in the future. Verdure OS targeted x86-64 PCs, but AArch64 devices were a future goal. I was focused on using modern standards such as ACPI, UEFI, and APIC during development.

SharpFNT

A C# library for reading and writing AngelCode bitmap fonts in XML, text, and binary. It was originally part of the EvEngine, but I decided to separate it and release it as open-source. Since its release, it has received over 175,000 downloads on NuGet and has found use in other games and game engines.

FNTTools

A .NET Core command-line tool built off of SharpFNT. It is capable of converting and inspecting AngelCode bitmap fonts.

Skills

- C
- Rust
- C#
- .NET and .NET Framework
- Adobe Photoshop
- Pixel Art
- Game Programming
- DirectX 11
- XAudio2
- Kernel Programming
- UEFI App Development
- Windows Forms
- Git
- OpenGL
- OpenAL
- Unity (game engine)
- Graphic Design
- GTK
- Vala
- HTML and CSS

Education

North Paulding High School

Class of 2016

Graduated with CTAE award in Graphic Communication/Design.