

Ethan Vrhel

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Education

University of Washington - BS, Computer Science 2020–2024

- 3.81/4.0 GPA

Experience

Undergraduate TA at University of Washington September 2023–December 2023

- For CSE 341 - Programming Languages

Contract Software Engineer at Artifex Software July 2021–December 2023

- Refactored Ghostscript library to use in-house XML parser over Expat

Undergraduate TA at University of Washington January 2023–March 2023

- For CSE P 557 - Trends in Computer Graphics

Software Engineer Research Intern at MSNW LLC July 2021–Aug 2021

- Created an API and scripting language to streamline running physics simulations

Contract Software Engineer at Artifex Software July 2020–Sep 2020

- Developed Java interface for Ghostscript C library using the JNI
- Wrote demo PDF viewer in Java using my interface

Kumon Sep 2019–March 2020

- Tutored elementary and middle school students and graded work

Projects

[Lythium](#)

- 2D Game Engine using OpenGL and C++, Objective-C, and Lua

[Lithium](#)

- 3D Game Engine using OpenGL and C++

[MatrixUtil](#)

- Linear algebra library with Intel Intrinsic and ARM Neon for increased performance

[LScript](#)

- Scripting language

[hexview](#)

- Cross-platform binary command line file reader

Extracurriculars, Awards & Leadership

Eagle Scout (Boy Scout Troop 751) 2013–2019

- Organized food drive for Issaquah Food Bank, collected over 1000 lbs of food

WSPTA (Washington State PTA) Game Development Competition 2018, 2019

- Created and led team for competition, programmed game engine, won Best Code twice

Piano 2008–2019

- Won Paderewski medal from American College of Musicians National Programs

Skills

Technical: Strong C/C++, Intel Intrinsic and ARM Neon, Objective-C, OCaml, OpenGL, Cocoa, Windows Subsystems, POSIX, C#, Java, Python, HTML/CSS, JavaScript, Unity, Lua

Interests: Graphics programming and optimization techniques, hardware acceleration, systems programming, programming languages