Nathaniel G. Wood

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EDUCATION

BS, Computer Science

Oregon State University

- Relevant Coursework: Software Development; Algorithms; Operating Systems; Data Structures; Web Development; Databases; Cyber Security; Machine Learning; Computer Graphics; Parallel Programming
- Extracurricular: Game Development Club member since 2022.

PROJECTS

Website Generator - Hackathon

- Placed first out of 150+ teams in a 36-hour software development competition.
- Built a modern web app for generating and demonstrating styled HTML, helping users to create personal web pages.

Custom Unix Shell - Operating Systems

- Developed a Unix shell in C featuring built-in commands, variable expansion, and input/output redirection.
- Integrated custom signal handling and the ability to run foreground and background processes separately.

One-Time Pad - Operating Systems / Cyber Security

- Coded five C programs to function together as a command line server/client application for encrypting and decrypting messages.
- Utilized the one-time pad cipher to handle encryption and decryption with random custom-length keys.

Voxelization GLSL Shader - Computer Graphics Shaders

- Created a GLSL geometry shader to transform the geometry of an object into a variable amount of cubes.
- Wrote a fragment shader script to pixelate object textures in unison with the geometry voxelization.

Randomized Rhythm Game - Software Development

- Developed a rhythm game with custom assets, scripts, and an intuitive 3D user interface, achieving smooth and exciting gameplay.
- Implemented a partner-developed microservice to randomly and dynamically generate notes and audio.

PROFESSIONAL EXPERIENCE

Engineering Learning Assistant

Oregon State University

Led and facilitated labs for several dozen first-year students to hone their critical engineering thinking.

Line Cook

McMenamins

Prepared 50+ dishes each day while maintaining functionality and cleanliness of a fast-paced kitchen.

Software Engineering Fellow

Headstarter AI

Designed and developed seven web-based software projects as part of a fluid team using the latest technologies.

SKILLS

- Languages: C; C++; Python; Java; JavaScript; GDScript; GLSL; HTML
- Technologies: Git; GitHub; Linux; Vim; Office 365; React; Node; Next; Jest; Tailwind CSS; OpenGL; OpenCL; OpenMP; CUDA

Apr. 2024 - May 2024

Apr. 2024 - May 2024

Jan. 2024 - Feb. 2024

Aug. 2024 - Present

Sep. 2024 - Present

Corvallis, OR

July 2024 - Aug. 2024

Remote

Feb. 2024

June 2025 Corvallis, OR

Aug. 2024

Corvallis, OR