Allison Thompson
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Education

Oregon State University
Currently pursuing an Honors Bachelor of Science in Computer Science with an Applied Option in Simulation and Game Programming and a minor in English. Fourth year with a 3.88 GPA. Expected to graduate in June 2023.

Hood River Valley High School
Graduated valedictorian with a 4.0 GPA in June 2019.

Relevant Employment

Undergraduate Learning Assistant at Oregon State University, Sept. 2022 - present
For the class ENGR 100. Help run studio sessions, work with students on problems and activities.

Projects

- Currently working on an Honors thesis project which involves transposing an existing forest modeling program (3-PG) to C++ and adding a graphics component (using OpenGL) to show tree growth based on different parameters
- Currently working on a 9 month Capstone design team project where we are using the game engine Bevy to create a rigid body dynamics driving simulation
- Programmed a basic forest generation program in C++ with OpenGL that allows a user to place randomly generated trees on a plane
- Programmed a modifiable moss shader in C++ with GLSL that can add moss to an OBJ file
- Created (including models) a 3 minute long animation using Blender
- Programmed robots in Java as part of FRC team A05 Annex senior year of high school, went to FRC Worlds in 2019

Relevant Coursework

Introduction to Computer Graphics, Computer Graphics Shaders, Vector Calculus, Computer Science Skills for Simulation and Game Programming, Computer Animation, Data Structures, Computer Architecture and Assembly Language, Web Development, Intro to Parallel Programming, Operating Systems

Skills

Proficient in:

- C/C++
- OpenGL and GLSL
- Git/GitHub
- Working in a Linux environment
- Writing

Previous experience with:

- OpenMP, SIMD, CUDA, OpenCL
- Python, Java, HTML, CSS, JavaScript, R, Rust, MASM
- Krita (digital art creation program), GIMP (image manipulation software)
- Blender