

Nicholas R. Hamilton

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Education

Michigan Technological University, Houghton, MI

B.S., Computer Science

Expected Graduation: December 2019

Cumulative GPA: 3.9, Department GPA: 4.0

Honors: Dean's List (x2)

Project and Related Experience

Husky Game Development Enterprise

January 2017 - Present

Worked cooperatively on a team developing a video game in Java.

- Develop a new game engine from the ground up, using the Java programming language.
- Communicate with a team using GitHub, Slack, Taiga, and Google services
- Draw 2D artwork
- Collaborate using Scrum and Agile development processes

Self Study

2007 - Present

Java and C++ for work with:

- Game Development
 - 2D video games for the PC
 - OpenGL and GLSL shaders for rendering
- Machine Learning
 - Artificial neural networks and genetic algorithms
 - Optical character recognition
- Procedural Terrain Generation
 - Perlin and value fractal noise
 - Procedurally generate 2D and 3D landscapes and heightmaps
- Physics Simulations
 - 2D rigid body physics
 - 3D N-body gravity simulations

Work Experience

Michigan Technological University, Houghton, MI

September 2016 - Present

Registrar Assistant

- Assist with clerical duties
- Add and drop students' classes
- File confidential documents

Century High School, Rochester, MN

September 2015 - June 2016

Tutor

- Assisted students in learning a number of subjects, including:
 - Computer Science
 - Mathematics
 - Physics