

Nicholas R. Hamilton

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EDUCATION

Michigan Technological University, Houghton, MI
Ph.D., Computer Science
GPA: 4.00

January 2020 - Present
Expected Graduation: May 2023

Michigan Technological University, Houghton, MI
B.S., Computer Science
Minor, Mathematical Sciences
Department GPA: 4.00
Cumulative GPA: 3.78

September 2019 - December 2019

Recipient of seven Dean's List honors, member of Upsilon Pi Epsilon honor society

WORK EXPERIENCE

Graduate Research Assistant

May 2020 - Present

Michigan Technological University, Houghton, MI

- Focusing on machine learning and computer vision
- Researching augmentation methods for object detection

Graduate Teaching Assistant

December 2019 - May 2020

Michigan Technological University, Houghton, MI

- Graded student work in multiple courses
- Proctored in-person and online exams

Full Stack Developer Intern

May 2019 - September 2019

IBM, Rochester, MN

- Worked in Agile, collaborative environment with daily Scrum meetings
- Developed significant portion of tool for migrating customers to IBM's latest version of WebSphere

Computer Science Learning Center Coach

September 2018 - April 2019

Michigan Technological University, Houghton, MI

- Taught students material from various courses including discrete math, data structures, Java, and C
- Assisted students with homework and studying for exams

COMPUTER SKILLS

Proficient in software design and development, Linux, concurrent computing, and databases

Languages and Libraries

- | | | | | | | | | |
|----------|----------|--------|--------|----------|---------|-----------|----------|-----------|
| • C | • C++ | • Java | • JS | • Python | • C# | • x86 | • MySQL | • HTML |
| • OpenGL | • OpenAL | • SDL2 | • GLFW | • NumPy | • Keras | • Node.js | • jQuery | • Unity3D |

PROJECT AND RELATED EXPERIENCE

Personal Projects

January 2007 - Present

14 years of C, C++, and Java for work with projects including:

- Machine learning including optical character recognition, computer vision, text generation, and deep learning
- Physics simulations including 2D rigid body physics and 3D gravity simulations
- Procedural generation including texture generation and terrain generation

Husky Game Development Enterprise

January 2017 - December 2018

Michigan Technological University, Houghton, MI

- Developed cross platform 3D game engine using Java and OpenGL
- Used GitHub, Slack, Taiga, and Google services for team communication
- Collaborated using Scrum and Agile development processes