Nicholas R. Hamilton

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EDUCATION

Michigan Technological University, Houghton, MI **January 2020 - Present**
Ph.D., Computer Science **Expected Graduation: May 2023**
GPA: 4.00

Michigan Technological University, Houghton, MI **September 2016 - December 2019**
B.S., Computer Science
Minor, Mathematical Sciences
Department GPA: 4.00
Cumulative GPA: 3.78

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