

# Kyle K. Wilkinson

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## Education

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**The University of Michigan – College of Engineering** - Ann Arbor, MI

*Bachelor of Science in Computer Science, Minor in Electrical Engineering*

**May 2023**

- GPA: 3.89/4.00
- Coursework in Calculus 1-4, Linear Algebra, Data Structures and Algorithms, Statistics, Logic Design, Computer Organization, Embedded System Design, Web Systems, Software Engineering, and Computer Security
- Strong understanding of Java, C++, Git, VB.NET, and Python
- Recipient of Regents Scholarship 2019-2020

## Work Experience

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**FANUC America Corporation – R&D Product Information Intern**

**May 2022 – August 2022**

- Streamlined common procedures leading to an estimated 70%-time-reduction in publishing manuals
- Worked directly with users to find inefficiencies with information management tool to incorporate fixes that suit their needs
- Modified user interface using VB.NET to be intuitive to reduce user error
- Used Git to manage several releases of information management tool for faster project turnaround times
- Created SQL procedures and triggers to develop a source control system for multiple database tables

**University of Michigan – Research Assistant**

**May 2021 – January 2022**

*Fault Prediction for FFF 3D Printing (September 2021 – January 2022)*

- Developed a neural network using PyTorch that can predict a layer-shift fault with over 99% accuracy to allow users to adjust printer settings before a fault occurs and save time and money
- Designed and implemented a data collection system that allows tests to be done four times faster

*Automatic Fault Detection for FFF 3D Printing (May 2021 – September 2021)*

- Created algorithms to detect faults using real-time data and touch-probe sensor
- Used multi-processing to allow for sample-point generation and 3D printing concurrently with Python
- Created an advanced, user-friendly interface using HTML, CSS, JavaScript, Bootstrap, and Knockout

**Game Development – Project Owner / Developer**

**April 2020 – Present**

- Program software for Minecraft using Java and work with clients to create programs that meet their needs
- Guide aspiring Java developers in creating software for a Minecraft server by giving code reviews and making sure the team is on track to meet deadlines
- Design a pathfinding algorithm that generates roads automatically in a 3D space while making efficient use of memory
- Integrate MySQL databases with software allowing organized data storage and faster data queries

## Leadership & Achievements

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**Tau Beta Pi (Engineering honor society)**

**December 2020 – Present**

**Scouts BSA**

**2012 – August 2019**

*Eagle Scout (June 2019)*

- Fundraised for, designed, and built 3 Little Free Pantries for local elementary schools to fight food insecurity.
- Awarded Outstanding Student Volunteer of 2019 by Lakes Area Chamber of Commerce for dedication to community service through Interact and Eagle Scout Project.

*Troop Leadership*

- Troop Guide (2 years) – Introduced new scouts to the troop. Helped the new patrol work independently by guiding the patrol leader. Assisted the leader when necessary and taught basic skills to the patrol.

**Interact Service Club (Rotary International)**

**April 2015 – April 2019**

*President (2017-2019)*

- Led board members and presented at meetings. Delegated tasks to board members and made sure everything ran smoothly.
- Organized a multi-school fundraiser for ShelterBox to assist those affected by Hurricane Harvey – Raised over \$1,000

**Treger Studio of Martial Arts (Karate instructor and First Degree Black Belt)**

**December 2016**