

Kyle K. Wilkinson

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Education

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

Bachelor of Science in Computer Science, Minor in Electrical Engineering

April 2023

- GPA: 3.90/4.00
- 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 Vision
- Strong understanding of Java, C++, VB.NET, Python, SQL, and Git

Work Experience

Ford Motor Company – Software Engineer

September 2023 – Present

Manufacturing IT Software Engineer (November 2024 – Present)

- Develop a full-stack application to enhance manufacturing quality by ensuring plant workstation readiness through a layered approval system.
- Provide technical support and research emerging XR technologies (HoloLens, RealWear) to enhance business operations.

Order Scheduling Software Engineer (September 2023 – October 2024)

- Created and tested Java Springboot APIs and iterated on Angular UI designs to enhance the vehicle scheduling and VIN generation system.
- Enhanced application security using Cycode and Checkmarx, and utilized Tekton for CI/CD during a PCF to OpenShift platform migration.

Website Development – Designer / Developer

June 2023 – December 2023

- Designed responsive web elements for an online store project using Figma
- Developed site using Next.js and deployed to AWS Lambda using SST

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
- Created procedures and triggers to develop a source control system for multiple database tables in Microsoft SQL Server

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
- Created an advanced, user-friendly interface using HTML, CSS, JavaScript, Bootstrap, and Knockout

Game Development – Project Owner / Developer

April 2020 – August 2023

- 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

Leadership & Achievements

Tau Beta Pi (Engineering honor society)

December 2020 – April 2023

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.