

Dominika Bobik

Software Engineer

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Education

B.S. Computer Engineering

Michigan Technological University 🌐

2019 – 2023

- Student athlete: Women's Tennis Team
- Electrical and Computer Engineering Undergraduate Advisory Board
- GPA: 4.0

Professional Experience

Software Engineering Intern

Microsoft Corporation 🌐

May 2022 – Aug 2022

Implemented DoH (DNS over HTTPS) Proxy that increased the overall security and privacy of the Windows operating system.

- Executed asynchronous queries using proprietary threading systems
- Configured network to reroute DNS traffic
- Ensured that the system runs safely and efficiently

DNS, HTTPS, C/C++

Software Engineering Intern

Open Systems International 🌐

May 2021 – Aug 2021

Developed new features for the power outage management system "Compass" for various customers ranging from private firms to national electric corporations.

- Implemented dynamic elements in Compass's map software using the MapBox API while maintaining cross-platform compatibility and a positive user experience

C#, Xamarin Forms, JavaScript, HTML/CSS

Projects

Personal Website 🌐

Jun 2022

TypeScript, React.js

eeAID 🌐

Jun 2022

Progressive web app that finds color code based on the resistance of the basic circuit component and performs calculations commonly used by electrical engineers.

TypeScript, React.js

DBank 🌐

May 2022

Commandline-based banking application.

Supabase, JavaScript

GVSC Leader-Follower 🌐

Jan 2022 – May 2022

Worked on implementing the autonomous following behavior in a 5-robot convoy using data from Lidar sensors.

ROS, Python, C++

Tic Tac Toe 🌐

Jan 2022

Console-run tic tac toe game for 2 players.

C++

Research Experience

Security and Privacy Lab 🌐

Research Assistant

Sep 2022 – Dec 2022

"Towards Secure Decentralized Cloud Storage by Leveraging Blockchain Technology"

Led a research study in cloud system security focusing on error-correcting codes that are suitable for flash memory in a decentralized cloud architecture.