

NAM HAI NGUYEN

East Lansing, MI | nguyenhainam8668@gmail.com | (517) 980-4310

<https://bit.ly/portfolio-euclid> | <https://www.linkedin.com/in/nam-nguyen-95452a252/>

EDUCATION

Michigan State University, College of Engineering, Honors College **East Lansing, Michigan**
Bachelor of Science, Computer Science Sep 2022 - Present
Coursework: Data Structures and Algorithms, Object-Oriented Software Development, Database Systems, Computer Organization and Architecture
GPA: 4.0/4.0
Awards: Dean's List for Spring, Fall Semesters of 2022, 2023

TECHNICAL SKILLS

Beginner: socket.io, PyTorch, React Native, C#
Intermediate: SQL, RESTful API, Firebase, Zustand, axios, React Flow, Postman
Advanced: Python, C++, TypeScript, MERN stack, HTML/CSS

TECHNICAL EXPERIENCE

CourseFlow [GitHub](#) **East Lansing, Michigan**
Personal Project Dec 2023 – Feb 2024

- Devised a Full-stack Web Application that helps college students map out courses in form of flow chart, leveraging **Topological Sorting Algorithm**
- Utilized **React** and **React Flow** with **TypeScript** to create interactive and captivating node-based web design
- Employed **Vite** development server for client side, significantly accelerating development process by up to **100%** compared to traditional setups.
- Implemented **12 API endpoints** to support CRUD operations and ensured seamless interactions between frontend and backend by testing with **Postman**
- Enhanced security by applying **bcrypt** to hash user passwords, safeguarding users' sensitive information from potential breaches

Michigan State University [GitHub](#) **East Lansing, Michigan**
Professor Assistant Sep 2022 - Present

- Cooperated with Prof. Zhichao Cao to refine NELoRa model by experimenting higher Spreading Factor (SF) of 11 and 12, aiming to increase communication range and extend each node's battery life by **272%**
- Utilized **Python** to retrain dual-DNN model for denoising and decoding chirp symbols, leveraging results as benchmarks for further research

Halloween-Spartan Themed Action Sudoku [GitHub](#) **East Lansing, Michigan**
CSE335 – Object Oriented Software Development Aug – Sep 2023

- Organized team of 5 students to implement a novel engaging version of Sudoku, taking full advantage of **C++** for backend and cross-platform library **wxWidgets** for frontend
- Slashed development time by **20%** by maintaining a clear communication and seamless collaboration through **Git** and **GitLab**
- Adhered to **object-oriented design principles**, contributing to efficient launch of final program

SpartaHack 8: ReTiMe [GitHub](#) **East Lansing, Michigan**
Developer Jan 2023

- Performed full-stack engineer on Realtime Messaging Web App (ReTiMe) in team of 3 within 48-hour duration of MSU's annual Hackathon, allowing **50** users to access simultaneously
- Developed a space-themed UI using **HTML/CSS/JavaScript** for a visually appealing experience
- Facilitated real-time messaging with **Express.js** and **socket.io** for fast and lively users' interaction