NAM HAI NGUYEN

nguyenhainam8668@gmail.com | (517) 980-4310 | LinkedIn | Portfolio

EDUCATION

Michigan State University, College of Engineering, Honors College

East Lansing, Michigan

Bachelor of Science, Computer Science

GPA: 4.0/4.0

Sep 2022 - Present

Coursework: Data Structures and Algorithms, Object-Oriented Software Development, Database Systems,

Computer Organization and Architecture

TECHNICAL SKILLS

Languages: Python, C/C++, C#, SQL, TypeScript, HTML/CSS

Frameworks: Express, React, Node.js

Libraries: React Flow, Zustand, axios, mongoose, socket.io, wxWidgets

Developer Tools: Git, Visual Studio Code, Visual Studio, Postman, PyCharm, CLion

TECHNICAL EXPERIENCE

CourseFlowSoftware Developer

GitHub

East Lansing, Michigan

Dec 2023 – Feb 2024

- Developed a Full-stack Web Application with **MERN stack** 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

Professor Assistant

GitHub

East Lansing, Michigan

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-Deep Neural Networks model for denoising and decoding chirp symbols, leveraging results as benchmarks for further research

Halloween-Spartan Themed Action Sudoku

Lead Software Developer

<u>GitHub</u>

East Lansing, Michigan

Aug 2023 – 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 an elegant graphical user interface
- 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

Software 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