Hangsihak Sin

Waterloo, Ontario, Canada  [hsin9104@conestogac.on.ca](mailto:hsin9104@conestogac.on.ca)  (519) 504-7489  [linkedin.com/in/hangsihaksin](http://www.linkedin.com/in/hangsihaksin)

 <https://github.com/hsihak>

# SUMMARY

Seeking a Spring Term 2024 Co-op opportunity as a Software Developer, Full-stack Developer, or Data Analyst to leverage my technical skills, passion for coding, and strong problem-solving skills to innovative projects while gaining practical experience in a professional software development environment.

# EDUCATION

## Bachelor of Science (Honours), Computer Science September 2022 – August 2026

*Conestoga College*, GPA: 3.85/4 Waterloo, ON

* **Courses:** Object-Oriented Programming (OOP), Data Structures and Algorithms, User-Experience Design, System Analysis and Design, Introduction to Relational Database, Software Quality
* **Activities:** Google Developer Student Club, Coding Jam, ThinkNorth Hackathon, Ignition Hacks

## Ontario College Diploma — Electro-Mechanical Maintenance August 2019 – May 2021

*Conestoga College*, GPA: 3.90/4 Cambridge, ON

* **Courses:** Generic CAD (2D), Programmable Logic Controllers (PLCs), Industrial Electronics, Robot Programming

# TECHNICAL SKILLS SUMMARY

**Languages:** HTML/CSS, JavaScript, TypeScript, Python, C/C++, SQL, JQuery, PHP (basics)

**Technologies:** React.js, Vue.js, Node.js, Express.js, Tailwind CSS, Styled Components, Material UI

**Tools:** Docker, Vagrant, Cisco Packet Tracer, Wireshark, Unity (basics), Oracle Virtual Machine, Azure DevOps, GitHub, Adobe

XD, Roblox, C++ Builder, Figma, Flask, JMeter, Selenium

**Databases:** MySQL, MongoDB Atlas, Firebase

# RELATED WORK EXPERIENCE

## Frontend Developer Volunteer October 2023 - Present

*Communitech*Kitchener, ON

* Collaborating with cross-functional teams to enhance user experience and functionality.
* Integrating frontend components with the backend machine learning algorithms and databases.
* Creating responsive and user-friendly web interfaces for community using React.js and Flask.
* Contributing to projects that directly support and benefit the Region of Waterloo community through Communitech.
* Currently developing Knowledge Container and DocWise projects. Increased application performance by 70%; scaled to serve.

## Software Development Intern June 2023 - September 2023

*Kenja K.K* Tokyo, Japan

* Collaborated with senior engineers to design, code, test, and maintain software applications for multiple clients.
* Participated in Agile development practices, including daily stand-up and sprint planning sessions.
* Conducted code reviews and collaborated with developers to address code-issues reported on Zenhub issue tracking system.
* Assisted in developing Rooms3 platform by transforming Figma design into functional code using Vue.js and TypeScript.
* Improved programming module by 15%, increasing the overall speed of the software by 10%.
* Performed unit testing on individual functions and monitored full-scale system performance.

# PROJECTS

## RiskAlert September 2023 -December 2023

*Conestoga College* Waterloo, ON

Github: <https://github.com/mag9073/CSCN72030-Sec3-Group1>

* Developed a software system to help in preventive healthcare using Python machine learning algorithms and React.js.
* Created an HMI (Human-Machine Interface) for healthcare professionals, making it more convenient to evaluate patient risk.
* Designed and implemented code from Unified Modelling Language (UML) through the process of System Analysis and Design.
* Implemented the K-Neartest Neighbors (KNN) machine learning algorithm to predict the likelihood of patients developing conditions like Diabetes Mellitus, Heart Disease, and Stroke.
* Conducted a thorough unit testing, integration testing, and usability testing.
* **Technologies used:** Scikit learn, NumPy, Pandas, Python, Flask API, JavaScript, React.js, Jira, MS Teams, Adobe XD.

## MedAlert August 2023

*Ignition Hacks*  Toronto, ON

Github: [https://github.com/SBerenji/MedAlert](https://github.com/SBerenji/MedAlert%20%20)

* Developed an all-in-one application to enhance communication between patients and healthcare providers.
* Provided healthcare providers with a platform for entering prescriptions, tracking medications, and preventing drugs and allergy interactions.
* Successfully collaborated with a cross-functional team to complete the project within the hackathon deadline.
* **Technologies used:** Node.js, Express.js, React, Tailwind CSS, MongoDB, Adobe XD.

## LibraSense May 2023

*ThinkNorth Smart Cities 2023 – Seneca College*  Toronto, ON

Github: <https://github.com/scleung04/LibraSense-Project>

* Successfully advanced to the final round of a competitive hackathon competition.
* Designed wireframe prototypes with Adobe XD to visualize and plan the user interface and user experience.
* Integrated ESP-32 camera and sound sensor into an Arduino Uno-based system, leveraging the TensorFlow image detection library to identify people in a room.
* **Technologies used:** React Native, TailwindCSS, Python, TensorFlow, Arduino, Firebase, Adobe XD.

## NNClassifer April 2023

*Conestoga College*  Waterloo, ON

Github: <https://github.com/hsihak/Nearest-Neighbor-Classifier>

* Developed a C++ program that follows Object-oriented programming (OOP) and applies nearest neighbor algorithms to predict a phone’s orientation by reading 3D gravity data from its sensor.
* Created a class diagram using unified modeling language to show software component structure and relationships.

# INVOLVEMENT

## Hardware Checkout Volunteer September 2023

*University of Waterloo - Hack the North*  Waterloo, ON

* Assisted in the Hardware Checkout process, handling the checkout and return of hardware equipment to hackers while maintaining inventory accuracy.
* Helped hackers in the setup of their workstations to prepare for the project showcase in design bay event.

## Orientation Volunteer August 2023

*Conestoga College* Waterloo, ON

* Greeted and provided guidance to incoming students, ensuring they were directed to the appropriate orientation activities.