

Hangsihak Sin

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🐙 <https://github.com/hsihak> 🌐 <https://www.hangsihaksin.com/>

SUMMARY

Highly Motivated and Detail-Oriented Bachelor of Computer Science student at Conestoga College, with a strong proficiency in HTML5, CSS3, React, Next.js and familiarity with .NET framework, C#, and Angular. Seeking to apply for the Co-op Student - IT Savings and Retirement (Junior Software Developer) position at Equitable Life of Canada. Eager to apply my analytical abilities and technical skills in a dynamic environment, contributing to the development of efficient and high-quality software solutions.

EDUCATION

Bachelor of Science (Honours), Computer Science

September 2022 – August 2026

Conestoga College, GPA: 3.87/4

Waterloo, ON

- **Courses:** Object-Oriented Programming (OOP), Data Structures and Algorithms, System Analysis and Design, Introduction to Relational Database, Software Development Life Cycle, Software Quality I: Testing Tools and Methodologies.
- **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++, C#, SQL

Technologies: React.js, Vue.js, Node.js, Express.js, Familiarity with .NET framework, .NET Core, and Angular.

Testing Tools: Knowledge of software testing methodologies, Familiarity with manual testing like Jest and MS Test and automation test environments such as Mocha, Selenium, and PyTest.

Other Tools: Docker, Vagrant, Cisco Packet Tracer, Wireshark, Oracle Virtual Machine, Azure DevOps, GitHub, Adobe XD, C++ Builder, Figma, Flask, JMeter, Selenium, Git Bash, Command-line prompt, MySQL Workbench, Familiarity with Kubernetes.

Databases: MySQL, MS Sequel Server, 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.

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 development, contributing to the Rooms3 platform using Vue.js and TypeScript.
- Conducted code reviews and collaborated with developers to address code-issues reported on Zenhub issue tracking system.
- Engaged in team discussions for requirement gathering and problem-solving.

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 for various diseases.
- Performed Manual and Automated Testing such Unit Test, Systems Test, Integration Test, and Usability Test.
- Implemented the K-Nearest Neighbors (KNN) machine learning algorithm to predict the likelihood of patients developing conditions like Diabetes Mellitus, Heart Disease, and Stroke.
- Trained the model based on Kaggle datasets.
- **Technologies used:** Scikit learn, NumPy, Python, Flask API, JavaScript, React.js, Jira, MS Teams, Adobe XD, PyTest, Selenium, Jest.

MedAlert

August 2023

Ignition Hacks

Toronto, ON

Github: <https://github.com/SBerenji/MedAlert>

- 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.

NNClassifier

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

- Supported hardware logistics and team coordination.
- 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.
- Facilitated orientation activities for new students.



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CANADA N2V 1P9

Student Achievement

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| | PROGRAM | PROGRAM GPA | PROGRAM WEIGHTED AVERAGE | ACADEMIC STANDING | CONVOCATION DATE |
|-----------|---|-------------|--------------------------|---|------------------|
| FALL 2017 | MOTIVE POWER TECHNICIAN - AUTOMOTIVE SERVICE | 3.85 | 88.39 | GRADUATE Program Completion: 2019-04-19 Document of Recognition: ONTARIO COLLEGE DIPLOMA Academic Award: - DISTINCTION | June 2019 |
| FALL 2019 | ELECTRO-MECHANICAL MAINTENANCE | 3.91 | 91.00 | ELIGIBLE TO CONTINUE | |
| FALL 2019 | ELECTRO-MECHANICAL MAINTENANCE | 3.90 | 90.70 | GRADUATE Program Completion: 2021-05-01 Document of Recognition: ONTARIO COLLEGE DIPLOMA Academic Award: - HIGH DISTINCTION | November 2022A |
| FALL 2021 | BACHELOR OF BUSINESS ADMINISTRATION (HONOURS) - INTERNATIONAL BUSINESS MANAGEMENT | 4.00 | 93.00 | ELIGIBLE TO CONTINUE Departure Date: 2021-10-06 | |
| FALL 2022 | BACHELOR OF COMPUTER SCIENCE (HONOURS) | 3.87 | 89.17 | ELIGIBLE TO CONTINUE | |

| COURSE NUMBER | DESCRIPTION | CREDITS | HOURS | GRADE | GRADE POINT |
|---------------|-------------|---------|-------|-------|-------------|
|---------------|-------------|---------|-------|-------|-------------|

MOTIVE POWER TECHNICIAN - AUTOMOTIVE SERVICE

| | | | | | | | | |
|-----------|--------------|---|---|-----|----|-----|------|--|
| FALL 2017 | Level 1 | | | | | | | |
| | MOTV2205-100 | MOTIVE POWER BUSINESS I | 3 | 45 | A+ | 91 | 4.00 | |
| | COMM1085-101 | COLLEGE READING & WRITING SKILLS | 3 | 42 | A | 84 | 3.75 | |
| | AUTO1460-100 | INTRODUCTION TO AUTOMOTIVE SERVICE AND REPAIR | 9 | 180 | A+ | 92 | 4.00 | |
| | AUTO1470-100 | AUTOMOTIVE REPAIR PRACTICES | 1 | 15 | A | 86 | 3.75 | |
| | MOTV1210-102 | DRAWINGS, SCHEMATICS AND BASIC ELECTRICITY | 2 | 30 | A+ | 95 | 4.00 | |
| | MOTV1705-100 | OZONE DEPLETION PREVENTION CERTIFICATION | 1 | 15 | A | 87 | 3.75 | |
| | COMP1280-101 | COMPUTER APPLICATIONS | 2 | 30 | A+ | 100 | 4.00 | |
| | MATH1830-101 | APPLIED MATHEMATICS | 3 | 45 | A+ | 92 | 4.00 | |

Session GPA: 3.95

Session Weighted Average: 91.33

| | | | | | | | | |
|-------------|--------------|---|---|----|----|----|------|--|
| WINTER 2018 | Level 2 | | | | | | | |
| | AUTO1230-101 | ENGINE SYSTEMS I | 3 | 36 | A | 82 | 3.75 | |
| | AUTO1250-102 | ELECTRICAL/ELECTRONIC FUEL AND EMISSION SYSTEMS I | 7 | 98 | A | 87 | 3.75 | |
| | AUTO1270-101 | DRIVE TRAIN SYSTEMS I | 3 | 36 | A | 86 | 3.75 | |
| | AUTO1290-101 | SUSPENSION/STEERING AND BRAKE SYSTEMS I | 3 | 42 | B+ | 75 | 3.50 | |

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|--|--|---------|-------|-------|-------------|
| MOTIVE POWER TECHNICIAN - AUTOMOTIVE SERVICE | | | | | |
| CDEV2070-101 | CAREER DEVELOPMENT | 1 | 15 | A+ | 97 4.00 |
| MOTV2250-100 | LEGAL ISSUES IN MOTIVE POWER | 2 | 30 | A | 86 3.75 |
| WELD1610-102 | WELDING FOR MOTIVE POWER | 2 | 30 | A+ | 93 4.00 |
| LIBS1540-101 | STUDENT SUCCESS FOR HIGHER LEARNING | 3 | 42 | A+ | 92 4.00 |
| Session GPA: 3.78 Session Weighted Average: 86.21 | | | | | |
| FALL 2018 | Level 3 | | | | |
| AUTO1220-102 | AIR CONDITIONING SYSTEMS | 2 | 28 | A | 83 3.75 |
| AUTO1260-102 | ELECTRICAL/ELECTRONIC AND EMISSION SYSTEMS II | 7 | 98 | A | 85 3.75 |
| AUTO2060-100 | ENGINE SYSTEMS II | 2 | 42 | A | 84 3.75 |
| AUTO2080-100 | DRIVE TRAIN SYSTEMS II | 2 | 42 | A | 84 3.75 |
| MOTV2215-100 | ENGINE FAILURE ANALYSIS | 2 | 42 | B+ | 78 3.50 |
| MOTV2265-102 | MOTIVE POWER BUSINESS II | 4 | 56 | A+ | 98 4.00 |
| MOTV2285-101 | MOTIVE POWER SHOP MANAGEMENT | 2 | 28 | A+ | 95 4.00 |
| LIBS1680-101 | INTRODUCTION TO WORLD CULTURE | 3 | 42 | A | 88 3.75 |
| Session GPA: 3.79 Session Weighted Average: 87.46 | | | | | |
| WINTER 2019 | Level 4 | | | | |
| AUTO2090-100 | SUSPENSION/STEERING AND BRAKE SYSTEMS II | 2 | 42 | B+ | 75 3.50 |
| MOTV2275-100 | ELECTRIC HYBRIDS | 2 | 42 | A+ | 92 4.00 |
| MOTV2295-100 | MOTIVE POWER RESEARCH | 2 | 28 | A+ | 97 4.00 |
| MOTV2300-101 | PARTS MANAGEMENT | 3 | 42 | A+ | 98 4.00 |
| MOTV2450-100 | FUELS AND DIAGNOSTICS | 4 | 56 | A+ | 90 4.00 |
| LIBS1160-102 | ESSENTIALS OF CANADIAN HISTORY | 3 | 42 | A | 82 3.75 |
| ELEC2130-100 | ADVANCED ELECTRICAL SYSTEMS | 4 | 56 | A | 86 3.75 |
| Session GPA: 3.86 Session Weighted Average: 88.60 | | | | | |
| ELECTRO-MECHANICAL MAINTENANCE | | | | | |
| FALL 2019 | Level 1 | | | | |
| ELEC1640-101 | ELECTRICAL SAFETY AND CODE | 2 | 28 | A+ | 91 4.00 |
| ELEC1850-100 | ELECTRICAL PRINCIPLES I | 3 | 42 | A+ | 90 4.00 |
| ELEC1860-100 | ELECTRICAL PRACTICES I | 3 | 56 | A | 88 3.75 |
| MILL1390-101 | MECHANICAL PRINCIPLES I | 4 | 56 | A | 89 3.75 |
| MILL1400-101 | MECHANICAL PRACTICES I | 4 | 70 | A+ | 93 4.00 |
| MILL1540-101 | PRECISION MEASURING FOR MECHANICAL MAINTENANCE | 1 | 14 | A+ | 91 4.00 |

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| ELECTRO-MECHANICAL MAINTENANCE | | | | | |
| MILL1380-101 | MECHANICAL/SHOP SAFETY | 1 | 14 | A+ | 99 4.00 |
| CON0101-100 | CONESTOGA 101 | 0 | 1 | AT | |
| Session GPA: 3.90 | | | | | |
| Session Weighted Average: 90.78 | | | | | |
| ELECTRO-MECHANICAL MAINTENANCE | | | | | |
| WINTER 2020 Level 2 | | | | | |
| CEPR1020-100 | CO-OP AND CAREER PREPARATION | 1 | 14 | P | |
| DRWG1685-100 | GENERIC CAD (2D) | 2 | 42 | A+ | 95 4.00 |
| ELEC1670-102 | PROGRAMMABLE LOGIC CONTROLLERS I | 3 | 42 | A+ | 94 4.00 |
| ELEC1680-102 | ELECTRICAL APPLICATIONS IN AUTOMATION AND ROBOTICS I | 4 | 56 | A+ | 92 4.00 |
| MILL1410-102 | MECHANICAL APPLICATIONS IN AUTOMATION AND ROBOTICS I | 3 | 42 | A+ | 100 4.00 |
| MILL1420-102 | FLUID POWER 1 | 3 | 42 | A+ | 91 4.00 |
| MILL1430-102 | PREDICTIVE AND PREVENTATIVE MECHANICAL MAINTENANCE - 1 | 3 | 42 | A+ | 100 4.00 |
| MILL1440-102 | RIGGING AND HOISTING | 2 | 28 | A+ | 91 4.00 |
| Session GPA: 4.00 | | | | | |
| Session Weighted Average: 94.75 | | | | | |
| SPRING 2020 Level 3 | | | | | |
| COOP1580-100 | CO-OP WORK TERM (ELECTRO-MECHANICAL MAINTENANCE) | 14 | 420 | P | |
| FALL 2020 Level 4 | | | | | |
| WELD2030-101 | WELDING - 1 | 3 | 42 | A+ | 100 4.00 |
| ELEC2070-100 | ELECTRICAL PRACTICES II | 3 | 56 | A | 83 3.75 |
| MILL2120-101 | MECHANICAL PRACTICES II | 4 | 56 | A+ | 93 4.00 |
| ELEC2060-100 | ELECTRICAL PRINCIPLES II | 3 | 42 | A | 80 3.75 |
| MATH2270-101 | TRADE CALCULATIONS 2 | 2 | 28 | A+ | 96 4.00 |
| MILL2110-101 | MECHANICAL PRINCIPLES II | 4 | 56 | A | 82 3.75 |
| OHS1320-101 | SAFETY IN THE WORKPLACE | 1 | 14 | P | |
| Session GPA: 3.87 | | | | | |
| Session Weighted Average: 88.47 | | | | | |
| WINTER 2021 Level 5 | | | | | |
| WELD2130-101 | WELDING II | 3 | 42 | A | 87 3.75 |
| ELEC2120-100 | INDUSTRIAL ELECTRONICS | 2 | 28 | A+ | 96 4.00 |
| ELEC2270-101 | PROGRAMMABLE LOGIC CONTROLLERS II | 3 | 42 | A | 89 3.75 |

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| ELECTRO-MECHANICAL MAINTENANCE | | | | | |
| ELEC2280-101 | ELECTRICAL APPLICATIONS IN AUTOMATION AND ROBOTICS - 2 | 4 | 56 | A | 88 3.75 |
| FPLT1120-101 | FIELD PLACEMENT (MILLWRIGHT AND MAINTENANCE) | 2 | 63 | P | |
| MILL2140-101 | FLUID POWER - 2 | 3 | 42 | A+ | 92 4.00 |
| MILL2150-101 | PREDICTIVE AND PREVENTATIVE MECHANICAL MAINTENANCE - 2 | 3 | 42 | A+ | 91 4.00 |
| MILL2130-101 | MECHANICAL APPLICATIONS IN AUTOMATION AND ROBOTICS - 2 | 3 | 42 | A+ | 98 4.00 |
| Session GPA: 3.88 Session Weighted Average: 91.19 | | | | | |
| BACHELOR OF BUSINESS ADMINISTRATION (HONOURS) - INTERNATIONAL BUSINESS MANAGEMENT | | | | | |
| FALL 2021 | Level 1 | | | | |
| ENGL71000-101 | ACADEMIC COMMUNICATIONS | | 42 | W | |
| BUS71200-101 | ORGANIZATIONAL BEHAVIOUR WITH INTERNATIONAL APPLICATIONS | | 42 | W | |
| COMP72370-101 | INFORMATION MANAGEMENT | | 56 | W | |
| ECON71050-101 | INTRODUCTION TO MICROECONOMICS | | 42 | W | |
| MATH71775-101 | BUSINESS MATH | | 56 | W | |
| CHIN71000-102 | INTRODUCTION TO CHINESE LANGUAGE AND CULTURE | | 42 | W | |
| BACHELOR OF COMPUTER SCIENCE (HONOURS) | | | | | |
| FALL 2022 | Level 1 | | | | |
| CSCN71000-100 | SOFTWARE ENGINEERING FUNDAMENTALS | 3 | 42 | A | 82 3.75 |
| CSCN71010-100 | COMPUTER SYSTEMS ARCHITECTURE FUNDAMENTALS | 3 | 42 | A | 82 3.75 |
| CSCN71020-100 | PROJECT I: SOFTWARE IMPLEMENTATION AND UNIT TESTING | 3 | 42 | A+ | 94 4.00 |
| ENGL71200-101 | SCIENTIFIC AND TECHNICAL COMMUNICATIONS | 3 | 42 | A+ | 93 4.00 |
| MATH71010-100 | LINEAR ALGEBRA AND DISCRETE MATHEMATICS | 4 | 56 | A+ | 95 4.00 |
| PROG71985-101 | PROGRAMMING PRINCIPLES | 4 | 56 | A | 87 3.75 |
| Session GPA: 3.88 Session Weighted Average: 89.05 | | | | | |
| WINTER 2023 | Level 2 | | | | |
| CSCN71030-100 | PROJECT II: TEAM BASED SOFTWARE DEVELOPMENT | 3 | 42 | A+ | 99 4.00 |
| PROG71030-100 | USER EXPERIENCE DESIGN | 3 | 42 | A+ | 93 4.00 |
| PROG71040-100 | OPERATING SYSTEMS AND SECURITY FUNDAMENTALS | 3 | 42 | A | 82 3.75 |
| PROG72365-101 | DATA STRUCTURES AND ALGORITHMS | 4 | 56 | A | 82 3.75 |

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| BACHELOR OF COMPUTER SCIENCE (HONOURS) | | | | | | | |
| | SOC71500-101 | GROUP DYNAMICS | | 3 | 42 | A | 86 3.75 |
| | PROG71020-101 | OBJECT ORIENTED PROGRAMMING | | 3 | 42 | A | 85 3.75 |
| | Session GPA: 3.83 | | | | | | |
| | Session Weighted Average: 87.53 | | | | | | |
| FALL 2023 | Level 3 | | | | | | |
| | CSCN72000-100 | INTRODUCTION TO DATABASE SYSTEMS | | 3 | 42 | A+ | 96 4.00 |
| | CSCN72010-100 | SOFTWARE QUALITY I: TESTING TOOLS AND METHODOLOGIES | | 3 | 42 | A | 89 3.75 |
| | CSCN72020-100 | COMPUTER NETWORKS | | 3 | 42 | A | 82 3.75 |
| | CSCN72030-100 | PROJECT III: SOFTWARE DEVELOPMENT LIFE CYCLE | | 3 | 42 | A+ | 100 4.00 |
| | SENG71000-100 | SYSTEMS ANALYSIS AND DESIGN | | 3 | 42 | A+ | 90 4.00 |
| | CEPR71050-100 | CO-OP AND CAREER PREPARATION | | 1 | 14 | P | |
| | Session GPA: 3.90 | | | | | | |
| | Session Weighted Average: 91.40 | | | | | | |
| TRANSFER CREDITS | | | | | | | |
| | MATH1660-101 | TRADE CALCULATIONS I | | | 14 | ITC | |

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