

CONTACTS



cchandel@uwo.ca



226-700-4807



Chandan/Github



SKILLS

LANGUAGES

English

French

PROGRAMMING LANGUAGES

C++ (primary)

Java (secondary)

Python (secondary)

HTML5/CSS/JavaScript *

PostgreSQL *

* - coursework/fun project

CHANDAN Chandel

Education



Masters in Software Engineering

Western University | Sept 2021—April 2023

Overall 88% and 4.0 GPA



Bachelors in Electrical Engineering

Western University | Apr 2021 Graduate

Last 2 years: 80.3% and 3.4 gpa

Overall: 78.3% and 3.24 gpa

Engineering Student Council Representative

Work Experience

2 x R&D Intern @Ansys - EMIT Team| Remote

Jan 2022 - Apr 2022 & Sep 2022 - Dec 2022

- Resolved features & defects using Python/C++ with Git Extensions and TFS in an Agile environment.
- Used Visual Studio's Performance Profiler to identify slow process root cause, changed process from $O(n^2)$ to $O(n)$ and removing other useless calculations, typically saving over 80% of the original process time.
- Added support for a new CAD format (GLTF) and fed data to existing 3D engine which relied on OpenGL, I then enabled automatic antenna extraction, from data stored within the CAD file.
- Modified the node visualisation behaviour to allow visualization of individual nodes (instead of all nodes), in C++.
- Designed and implemented python wrapper for C++ API to incorporate EMIT API support for PYAEDT developers.
- Stored limited number of band-pair results for a request by [client] to save time by not recomputing, in C++.
- Resolve a UX defect on a script that visualizes Spectrum Utilization. In another story I changed this script to enable it to use directory of xml files as an input—as opposed to the core product.

Robotics & Controls Specialist @JMP Solutions - Robotics Division| London, ON

May 2021 - Aug 2021

- Programmed and tested PLC's, robots, and vision systems for JMP's custom automation equipment.
- Exercised Project Management skills through risk planning, scheduling, and supporting customers.

Electrical Design Intern @Honda Manufacturing| Alliston, ON

May 2019 - Aug 2020

- Programmed Mitsubishi/Omron/Rockwell PLC's, HMI's, Fanuc Robots, and Cognex /iR Vision Systems.
- Laid out new industrial electrical control, and created appropriate electrical schematics.
- Designed multiple plant changes to save 66000 CAD/year outside of regular duties (Kaizen).

Programming Tutor @Real Programming 4 Kids | London, ON

Mar 2018 - Sep 2018

- Tutored students in Java, C#, C++, Python, VB and Unity through game development.
- Troubleshot errors for students and instructed them in better programming practices.

Business Research Assistant @Nokee Kwe | London, ON

Jun 2017 - Aug 2017

Goal: Improve throughput rate of non-profit employment/education services.

- Understood ideal business model and day-to-day real business practices.
- Identified KPI's to highlight areas that could use improvement, highlight inefficiencies in business practices.

Projects

Project Name	Description	Tech/Languages
Library Management System	This LMS enables; the addition of new books and their deletion, while providing the ability to search by author name or book title, and sorting the list view alphabetically by title, by book size or by publish date. Accessed through a User Interface generated in QT.	Visual Studio, C++, QT, Git
MBTI Analysis (Flask setup)	Used Google API to gather top 100 comments on any YouTube video. Used 4 natural language processing models each of which focused on 1 of the 4 axis's of the MBTI personality analysis metric. Used these 4 models to generate an overview of the personality types that were most likely to comment on that video along each axis.	Flask, Python, HTML, Google API, GitHub
Sketchpad	Developed a Sketchpad in Java which provides the capability to draw, drag, copy/paste, group/ungroup, delete a variety of shapes using a variety of colors. Additionally there is a generic ability to undo/redo events and save/load files.	Eclipse, Java, GitHub

Extracurricular/Volunteer Activities

Sunstangs Solar Car Project @Western University, Low Power Systems Team Member

Sep 2018 - Mar 2019

- Designed, built and tested multiple PCB's in Eagle for sub-systems throughout the vehicle.
- Upgraded communications to CAN bus system to provide noise resistant onboard communications, created test scripts to validate functionality.

Engineering Research Assistant @Western University | London, ON

May 2018 - Sep 2018

- Goal: Develop saliva melatonin concentration measurement solution for portable applications.
- Designed multiple PCB's, created and updated components of library in Eagle, selected components and microcontroller
- Generated code for PIC microcontroller in C, debugged and tested using Arduino

Undergraduate Engineering Student Council @Western University, ECE Student Body Representative

Sep 2017 - Apr 2018

- Acted as spokesperson for any concerns of an academic nature that affected my constituents.
- Maintained up to date knowledge on any motions being discussed and voted on behalf of student body.