Chelsea Wong

chelsea7wong@gmail.com chelseawong07 cheollie cheollie.github.io

Education

William Lyon Mackenzie Collegiate Institute 2020-2024
MaCS Program (specialized Math and Computer Science program with a 13% acceptance rate) *Toronto, Canada*

- **Extracurriculars:** Math Club President, Yearbook Team Senior Designer, Student Council Software Rep, Physics Club Executive, Calligraphy Club President, Cybersecurity Club Executive and Problem Setter, Mackenzie Science and Engineering Olympics Event Leader, DECA/FBLA, and Art Council Website Lead Developer and Front of House.

Johns Hopkins University 2024-2028
BS in Biomedical Engineering & Computer Science *Baltimore, Maryland*

Experience

X Series CTF Feb 2023 – Present
Organizer, Problem Setter, and Founding Member *Remote*

- Organized 3 cybersecurity capture-the-flag contests partnering with local high schools, attended by a total of **1,100+ global teams** ranging from middle school level to post-graduate level.
- Took upon logistics, marketing, and outreach roles, and obtained a combined $20,000 in prizes.
- Created multiple challenges focusing on digital forensics and OSINT.

Project Metropolis @ WLMCI Feb 2022 – June 2024
Project Manager and Founding Member *Toronto, Canada*

- Led team of **30+** developers, graphic designers, and writers to develop, update, and maintain our **school's app and website** which include announcements, blogs, games, and podcasts, used by **1100+ users** and **700+ downloads**.
- Coordinated tasks between multiple frameworks used; **Django** for backend and website and **React Native** for app.
- Worked alongside the Student Council to increase student involvement in school clubs and initiatives.

Bonfire Nov 2020 – Present
Founder and Administrator *Remote*

- Created an online community to connect students graduating in 2024 across the **Greater Toronto Area**, especially during lockdown. Implemented moderation, content regulation, and verification to keep the community safe.
- Hosted gaming tournaments, giveaways, study sessions, and movie nights, and created spaces for homework help, mental health, and sharing opportunities for **1,200+ students** from **80+ schools.**

Mackenzie Computer Programming Team @ WLMCI Oct 2022 – June 2024
Vice President and Marketing & Outreach Lead *Toronto, Canada*

- Delegated, oversaw and provided feedback for apparel design, graphics, and promotional material to promote the club, and initiatives including their district-wide hackathon, CTF, and game jam
- Reached out to potential guest speakers, sponsors, collaborating high schools, and judges for our initiatives.

Jane Street July 2024
WiSE Program Invitee and Attendee *New York City, USA*

Hackathons Canada Apr 2024 – Present
Vice President and Marketing Lead *Remote*

Ignition Hacks Mar 2023 – Aug 2023
Organizer and UI/UX & Marketing Executive *Remote*

Projects

signematic | *Python, Node.js, FastAPI, ThreeJS, MediaPipe, AdobeAPI* | 2nd Overall, MLH Best AdobeAPI at JAMHacks

- Created software that auto-generates accurate time-synced sign language transcriptions as a video from any video based on special ASL grammar (with the help of natural language processing models). Compatible with Adobe Express as an add-on for content creators and with Youtube as a Chrome Extension for viewers.
- Leveraging advanced algorithms and gesture models, our solution aims to enhance the viewing experience for the deaf and hard-of-hearing community by making entertainment more accessible.

MediBase | *React.js, Bootstrap, Flask, APIs* | First Place at LyonHacks II; Bronze at Toronto Science Fair

- Implemented a medication assistant as a safer and more accessible way to manage medication for those with language barriers and sight or memory issues. Generates QR code labels accompanied by an web app for detailed and personalized dosage information in multiple languages and text to speech instead of the original small hard to read labels. Includes notification, scheduling, and refill reminding features.

cleancue | *Python*, *OpenCV*, *Cohere*, *RaspberryPi*, *CUDA*, *Taipy* | Best Use of Taipy at Hack the North 2023

- Created a surveillance camera that tracks clutter, hazards, unused items, and left out food in shared spaces using computer vision and acts like a parent with speech and notification reminders aimed towards roommates, parents, and dementia patients.
- Used OpenCV and Python for the computer vision, and used Cohere and other APIs for text to speech and personality.

pengage | *Django*, *SQLite*, *HTML*, *CSS*, *Bootstrap* | National Finalist at FBLA CNLC 2023

- Built a web-based platform that allows students to easily track and sign up for school events, participate in challenges and earn points, and compete with their peers for prizes and recognition as a way to increase student participation in school events and activities, which was the given prompt.
- Included an events, points, attendance, reward, badge, and leaderboard system.

Technical Skills

Languages: Python, Java, C++, JavaScript, HTML/CSS, Ruby, Processing
Frameworks/Engines: Django, Flask, React, React Native, Unity (currently learning)
Tools: VS Code, GitHub, MongoDB, Figma, Adobe Photoshop/Illustrator, Blender, SketchUp, DaVinci Resolve, Procreate

Awards

10x Hackathon Winner: HackMIT (2024), JAMHacks 8 (2024), FBLA CNLC National Finalist (2023), Hack the North (2023), JAMhacks 7 (2023), Holiday Game Jam (2023), LyonHacks II (2022), Holiday Game Jam I (2022), SuperPOSITRON (2021), LyonHacks I (2021), attended 17+.
Programming Contests: Canadian Computing Contest Sr. Honour Roll, 3rd Highest Female Score (2022); European Girls' Olympiad of Informatics Team Canada Training Camp Invitee (2022, 2023); UC Berkeley CALICO Fall '22 6th/271 (2022); participated in 30+ contests.
Cybersecurity Contests: CyberPatriot XVI 1st in Canada and top 0.30% globally (2024), CyberPatriot XV 2nd in Canada and top 0.28% globally (2023); 8th CTF team in Canada (2022), participated in 44+ contests, top 10% in a couple.
Misc: NCWIT Aspirations in Computing Award Winner (2024); Friesens Cover Contest Bronze Winner (2024); New York Times Sixth Annual Podcast Contest Finalist (2023); Multiple Math Contest Distinctions (2021-2024); Canada Girls' Math Challenge Sr. 2nd (2023); IKEA Soft Toy Drawing Competition National Finalist (2019); Toronto Science Fair Bronze (2023).