COLLIN TOWN

(226) 224-6515 | collintown@gmail.com | linkedin.com/in/collin-town | github.com/towner-10

EDUCATION

Western University

London, ON

Bachelor of Engineering Science, Software Engineering - Dean's Honour Roll

Sept. 2021 - May 2025

EXPERIENCE

Part-time Software Engineering Researcher

Sept. 2023 – Present

Northern Tornadoes Project - Western University

London, ON

- Working alongside research team to develop visualization of tornado debris
- Developing an ArcGIS Pro integration that integrates OpenMP & CUDA processing to speed up calculations

Software Engineering Research Intern

May 2023 – Aug. 2023

Northern Tornadoes Project - Western University

London, ON

- Developed NTP Insights, a platform for sharing NTP data with the public that delivers on average 500 MB per event (360 images, LiDAR scans)
- Built using Next.js and a Node.js backend, the platform supports 4 GB large image uploads, the processing of large (5 GB+) point clouds and running social media analysis searching for up to 50 tokens
- Created an LLM classification model with 89% precision when detecting tornado sightings in Canada on social media websites. Successfully ran analysis on over 25 events in the 2023 season
- Collaborated with 3 other researchers to tailor the platform to their projects

Software Engineer

Sept. 2023 – Present

Western Formula Racing

London, ON

- Developing embedded ECU software using FreeRTOS and FlexCAN
- Working alongside GLV (Ground-level voltage) team to develop tooling to enable live editing of vehicle parameters via CAN
- Developing a custom plugin for Grafana to enable live communication with the vehicle

Sailing Instructor

May 2019 – Aug. 2023

Fanshawe Sailing School

London, ON

- Provided adult and children instruction in class and on the water
- Taught classes spanning from 10-40 students per group session
- Established strong working relationships with managers, students, and parents
- Certified CANSail Level 1/2 Instructor

PROJECTS

Letter Ninja – Ontario Engineering Competition | *Remix, Vite, React, Express*

Jan. 2024

- Winner of the Programming Divison at the Ontario Engineering Competition
- Developed an accessible, web-based dysgraphia learning experience in under 7 hours
- Implemented a custom distance and scoring algorithm by using a unique React based drawing canvas
- Utilized Remix and Vite to decrease the time to first paint by 54%

$\textbf{wikiNow - Hack Western 9} \mid \textit{Next.js, Tailwind, Flask, NLP, Stable Diffusion}$

Nov. 2022

- Earned the "Best Use of Prompt Engineering" award
- Creates How-To guides for any question, by using NLP and LDM during runtime
- · Backend manages image creation using a queue based system to allow for multiple requests at once
- Implemented multi-threading to decrease the time per request by 50%

Mucy | *Flutter, iOS, Android, Firebase*

Mar. 2021

- Published application on both, App Store and Google Play Store
- Built using the BLOC design principle to decrease development time and increase maintainability
- Collaborated with teammates to create the UI/UX using Adobe XD, and successfully translated it to Flutter
- Utilized Swift & Java to create localizations and decreased start-up time on both iOS and Android by 23%.

TECHNICAL SKILLS

Languages: Java, C#, Dart, Python, C/C++, JavaScript/TypeScript, HTML/CSS, SQL (Postgres)

Frameworks: Flutter, React.js, Node.js, Express.js, Flask, FastAPI, Prisma ORM

Developer Tools: Git, Linux, Unity, Figma/Adobe XD, MongoDB, MySQL, Postgres, Heroku, Docker, Gradle