Cameron Kroupa

Caledon, Ontario

ckroupa@uwo.ca | 647-612-4670 | cameronkroupa.com

SUMMARY OF QUALIFICATIONS

- Second year student enrolled in Honours Specialization in Computer Science & Major in Mathematics at Western University
- Achieved a **3.9 overall cumulative GPA**
- Current coursework includes CPU/Assembly, Artificial Intelligence, Software Engineering, Linear Algebra II
- Interested in Embedded Systems, Networks, and Artificial Intelligence
- **Hack Western 2024 Hackathon Prize Winner**

TECHNICAL SKILLS

Programming Languages: Python, Java, C, C++, TypeScript, React
Version Control & CI/CD: Docker, GitHub, GitLab, Jira
Databases: SQL, MongoDB
Operating Systems: Linux, Windows
Data Visualization: Python, Salesforce, Tableau

EDUCATION

Honours Specialization in Computer Science and Major in Mathematics **2023-2028**

Western University, London, Ontario

- Enrolled in Science Internship Co-op
- Dean's Honours List for 2023-2024 academic school year
- Excelled in computer science courses such as CS Fundamentals (100%), Unix & C (98%), and Data Structures & Algorithms (95%)
- Successfully completed notable mathematics courses, including Linear Algebra (98%), Calculus II (93%), and Applied Logic (90%)
- Awarded the $8000 Western Scholarship of Excellence (to the highest 250 high school admission averages)

WORK EXPERIENCE

Salesforce CRM Student **June 2024 - Sept. 2024**

United Services Group, Brampton, Ontario

- Utilized data modelling skills to develop division overview dashboards, highlighting profitability and other metrics for managerial decision-making

Backend Salesforce Developer **June 2023 - Sept. 2023**

United Services Group, Brampton, Ontario

- In Salesforce created a resource to guide employees work and enabled managers to assess quality control of provided services

Partnership Division Payroll **June 2022 - Sept 2022**

United Services Group, Brampton, Ontario

- Efficiently assisted with payroll calculations for various contractors
- Developed a recursive algorithm in Java that made payroll calculations more efficient based on user-inputted shift schedules rather than manual calculator input

TECHNICAL PROJECTS

Virtual Pet Game - Java
March 2025

Educational Assign, Western University

- Conducted domain analysis and gathered requirements
- Created use case diagrams, activity diagrams, class diagrams, and UI mockups using wireframes
- Applied research findings to develop a fully functional final product

Null Terminated Strings - Assembly
March 2025

Educational Assign, Western University

- Given a string and a key word had to transfer the string to a different memory location removing all instances of the key word in the string

ISBN Verification - Assembly
March 2025

Educational Assignment, Western University

- Given an ISBN String had to determine in under 17 lines of assembly if the ISBN is valid
  - Verified validity by computing the dot product with the error code vector for ISBN's and ensuring the result mod 10 is zero

LatticeTalk - TypeScript
March 2025

Club Project, Western Cyber Society

- Real time messaging application built on post quantum encryption methods
- Designed with the future of secure communication in mind
- Researching lattice-based cryptography, a post-quantum encryption system

GoFundUs - Javascript/Cairo
December 2024

Project, Western University Hackathon

- Hack Western 2024 Hackathon Prize Winner
- Designed and implemented a platform utilizing StarkNet's blockchain technology to enable secure and transparent group fund management, addressing mistrust in collaborative funding systems
- Developed a democratic decision-making process where fund withdrawals are processed only with majority fund member approval, ensuring accountability and trust in fund management

Maze Graph Solver - Java
November 2024

Educational Assignment, Western University

- Developed a weighted graph data structure to model a maze with walls, rooms, and key-restricted corridors. Used a Depth First Search (DFS) to find the a solution in the given the maze layout and key availability

West-Scrape - Python
June 2024

Personal Project

- Built a web scraper that signs into Western's Draft My service which shows all scheduling information for classes and scrapes all the data. This will be used in a future personal project to make a much better Draft My service

Frog Navigation Algorithm - Java
March 2024

Educational Assignment, Western University

- Created a game with a 2 frogs, navigating through pond cells while avoiding alligators and mud
- The frog must reach the other by making decisions based on cell types, including lily pads, reeds, and mud, which influence his movement and safety
- Developed a preference-based decision making system using a priority queue to determine optimal sequence of moves based on environmental factors