# **Cameron Kroupa**

Caledon, Ontario

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

# **SUMMARY OF QUALIFICATIONS**

#### Education

· Honours Specialization in Computer Science & Major in Mathematics (Second Year)

#### Technical Skills

- · Strong understand of Python, Java, and C
- Notable experience with HTML, CSS, JavaScript, NodeJS, and React
- Hands on experience with MongoDB and SQL
- Strong foundation through coursework of computer architecture and ARM Assembly

#### Achievements

• Western University 2024 Hackathon Prize Winner

# **TECHNICAL SKILLS**

#### Programming

- · Proficient in Python, Java, and C
- Strong foundation in data structures, algorithms, and object-oriented design
- Exposure to agile methodologies, unit testing, and debugging practices

## Front-End Development

- HTML, CSS, JavaScript, NodeJS, and React
- Understanding of UI principles

#### Databases

Hands-on experience with MongoDB and SQL

## Operating Systems & Environments

- Proficient with Linux/Unix, Windows, and MacOS operating systems
- Experience with Linux scripting
- Solid understanding of PC/CPU architecture
- Proficient in ARM Assembly

## Version Control & CI/CD

- · Skilled with Git and GitHub for source control
- Experience with Docker for containerization

## Data Visualization & Analytics

• Experience using Python, Salesforce CRM, and Tableau for data visualization

# **EDUCATION**

# Honours Specialization in Computer Science and Major in Mathematics Expected 2028

Western University, London, Ontario

- Enrolled in Science Internship Co-op
- Dean's Honours List for 2023-2024 academic school year
- Awarded Western Scholarship of Excellence (Highest 250 high school admission averages)
- Notable Completed Computer Science Courses:
  - CS Fundamentals 100% | Unix & C 98% | Data Structures & Algorithms 95%
- Notable Completed Math Courses:

Linear Algebra I 98% | Calculus II 93% | Applied Logic 90%

# **WORK EXPERIENCE**

### Salesforce CRM Student

June 2024 - Sept. 2024

United Services Group, Brampton, Ontario

• Utilized strong attention to detail and 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

• Established effective data entry skills on Salesforce, created a resource to guide employees work and enabled managers to assess guality 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

LatticeTalk March 2025

Club Project, Western Cyber Society

- · Real time messaging application designed with the future of secure communication in mind
- · Researching lattice-based cryptography, a post-quantum encryption system
- LatticeTalk features quantum safe end-to-end encryption to ensure highly secure user communication

GoFundUs December 2024

Project, Western University Hackathon

- Hack Western 2024 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

Educational Project, 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 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

March 2024

Educational Project, Western University

- Utilized proficient Java coding language knowledge to create a movement strategy game for a frog, navigating through pond cells while avoiding alligators and hazardous mud
- The frog must reach his mate 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