

# Christine Abdelmesih

Ottawa, Ontario - 6137990997

[ChristineAbdelmesih@cmail.carleton.ca](mailto:ChristineAbdelmesih@cmail.carleton.ca) - [www.linkedin.com/in/christine-abdelmesih](http://www.linkedin.com/in/christine-abdelmesih)

<https://abdelmesihchristine.github.io/Resume/>

---

## **HIGHLIGHTS OF QUALIFICATIONS**

- Skilled in C++, OOP and Software Development: Completed an advanced C++ course (building on an A grade achievement in C), applying robust object-oriented principles and optimized coding practices.
- Front-End Experience (HTML/CSS/JavaScript): Utilized web technologies to prototype engaging user interfaces, focusing on intuitive user flows and accessibility for strong UX/UI design.
- Proficient in Python and Java: Developed and maintained academic and personal projects, demonstrating a solid grasp of object-oriented programming and data structures.
- Passionate about AI/Machine Learning: Actively exploring frameworks such as TensorFlow and PyTorch; enthusiastic about integrating AI innovations into practical solutions and research.
- Strong Problem-Solving & Analytical Skills: Applied advanced algorithms to tackle complex challenges across multiple languages and platforms, focusing on efficiency and scalability.
- Collaborative Team Player: Contributed to open-source and group projects; gathered requirements, maintained clear documentation, and supported cross-functional teams.
- Professional Corporate Experience: Leveraged project management and communication skills as an Architectural Assistant in fast-paced, deadline-driven environments.
- Continuous Learner: Dedicated to expanding technical and design expertise; committed to staying updated with new technologies and design methodologies.

## **EDUCATION**

### **Bachelor of Computer Science, AI-Machine Learning stream.**

**September 2023-Present**

Carleton University, Ottawa, Ontario

- Third-year standing, 11.66/12 (A)
- Expected Graduation Date: April 2027 with 4 terms co-op

### **Bachelor of Architectural Engineering**

**September 2009-April 2014**

Helwan University, Cairo, Egypt

## **AVAILABILITY**

Available for 4, 8, 12, or 16 months beginning in May 2025.

## **APPLIED PROJECTS**

### **GetHub (C++)**

- Built a lightweight repository management system with doubly linked lists, deep copy constructors, and an intuitive menu-driven interface.
- Employed encapsulation and const-correctness across classes to maintain robust and clear interfaces.
- Ensured memory safety by using Valgrind to detect and resolve any dynamic allocation or deallocation issues.

### **RideShare (C++)**

- Developed an Uber-like application demonstrating multiple inheritance (Driver and Customer inheriting from a common User class and Drawable interface).
- Implemented a Visitor design pattern to display Drivers and Customers on a map, enabling multiple dispatch for efficient code organization.
- Created templated List structures (using function pointers for sorting) to manage dynamic collections of Drivers, Customers, and drawable objects.

### **Podify (C++)**

- Leveraged object-oriented design principles to enhance Podify's music-streaming application architecture and maintain clean, modular classes.
- Utilized GDB extensively to debug and isolate logical errors, improving application reliability and stability.
- Verified proper memory management through Valgrind, ensuring no leaks occurred during file streaming or dynamic data manipulation.
- Documented the codebase with concise function comments, detailing each class's role and integration with the overall system.

### **Electronics store (Java)**

- Utilized encapsulation, inheritance, and polymorphism to design the Electronic Store classes' structure, enhancing flexibility and code organization.
- Modified the Electronic Store codebase to utilize Abstract Data Types (ADTs) for streamlined data storage and retrieval, while integrating file input and output methods for effective data management.

### **Bank Account (Java)**

- Applied Object-Oriented Programming (OOP) principles to design the Bank Account classes, ensuring modularity and scalability.
- Updated the Bank Account code to integrate Abstract Data Types (ADTs) for optimized data handling, incorporating file input/output procedures to ensure secure data management.

### **Enchanted Library, Text adventure game (Python)**

- Designed an immersive map for player navigation within the Enchanted Library.
- Developed conversational prompts for interactions with ChatGPT, enriching gameplay with descriptive room and object narratives.
- Created textual data files to store game data, optimizing resource management and memory usage.
- Implemented game logic and algorithm to bring the Enchanted Library text adventure to life

## **WORK EXPERIENCE**

### **Architectural Assistant**

**March 2024 to August 2024**

Archicana, Ottawa, ON

- Assisted in creating detailed architectural drawings and specifications using design software, which reduced manual workload and increased team efficiency, contributing to timely project completion.
- Prepared detailed working drawings, specifications, and design details for interior projects, ensuring alignment with project standards and contributing to accurate project execution.

### **Camp Monitor**

**July 2023 to August 2023**

St. George and St. Anthony Church, Ottawa, ON

- Encouraged campers to work together during group activities, fostering a sense of inclusiveness and achieving an overall increase in camp participation.
- Supervised and organized daily activities for campers, ensuring safety and creating a positive environment that boosted engagement and teamwork.

### **Junior Interior Designer**

**March 2022 to August 2022**

SGH Design Partners, Toronto, ON

- Prepared detailed working drawings, specifications, and design details for interior projects, ensuring alignment with project standards and contributing to accurate project execution.
- Collaborated with senior architects in client meetings, helping to present design concepts and address feedback in real-time, resulting in improved client satisfaction and faster decision-making.

### **Senior Architect & Interior Designer**

**March 2019 to August 2021**

Archimid Architects, Cairo, Egypt

- Directed the architectural and interior design process, ensuring that all proposed designs reflected the client's functional needs and aesthetic preferences, resulting in client satisfaction and project approvals.
- Managed collaboration between architectural, interior design, and engineering teams to ensure cohesive project execution, from conceptual design through to completion.