**Education**

**Bachelor of Software Engineering, Engineering Internship Program September 2020 - May 2025**

*McGill University, Montreal, QC*

Relevant Coursework: Algorithms and Data Structures, Programming Languages and Paradigms, Computer Organization, Model-Based Programming, Software Requirements Engineering, Operating Systems

**Technical Skills**

**Programming Languages**: Python, HTML, CSS, JavaScript, C++, Java, C, C#, Ocaml, ARM Assembly, C#, C, C++

**Technologies/Frameworks:** NumPy, PyTorch, Jupyter Notebooks, Vue.js, JSON, Ember.js, Bootstrap, REST API, OOP, Git, GitLab, GitHub, Gherkin, Spring, Agile

**Experience**

**Game Developer Intern July 2022 – September 2022**

*Nahdet Misr Publishing Group, Cairo, Egypt*

* Contributed to developing an app called ‘Rehlatie’ created with **Unity3D** game engine using **C#.**
* Designed and added 2 entirely new screens to the app using **uGUI**.
* Recreated one screen design using **UI Toolkit**.
* Fixed app bugs related to **API** calls, calendar implementation, navigation system, UI design, and localized strings.

**Projects**

**Portfolio Website** [**Link**](https://mos2d.github.io/Personal_Website/)                                                                                                                                                        **January 2022 – Present**

* Created a responsive, appealing, and interactive website to represent my work, skills, and experience.
* Developed the website using **HTML**, **CSS**, **JavaScript**, and **Bootstrap**.

**Email Writer** [**GitHub Link**](https://github.com/Mos2d/Email_Writer) **May 2023**

* Implemented an interactive **AI** chatbot utilizing OpenAI's GPT-3.5-turbo model.
* Designed a server-side application using **Node.js**, enabling secure handling of **API** requests and responses between the front-end and OpenAI's **API**.
* Crafted a user-friendly front-end interface for the chatbot using **HTML**, **CSS**, and **JavaScript**.

**Agapé Agape                                                                                                 January 2023 - April 2023**

* Created an autonomous cube-delivery robot using LEGOs, **Raspberry Pi**, **BrickPi**, and **Python**.
* Developed movement, dispensing, and color detection algorithms.
* Assisted the hardware team in designing and building the robot.

**Unity Games** [**itch.io Link**](https://mos2d.itch.io/) **September 2018 - December 2018**

* Developed 3+ unity games using C#.
* Designed game characters and objects using Adobe Photoshop.
* Implemented AI into enemies to follow the player and allow realistic interaction.
* Applied complex movement mechanics and animations for a better experience.

**Competitions**

**McGameJam 2023** (Won Best Theme Integration) [itch.io Link](https://und3rscor.itch.io/thirstyrat-mcgillgamejam-2023)  **January 2023**

* Built an AI-integrated game about a Rat moving in the desert in **Unity** using **C#**..
* Developed the character’s movement and interaction with other objects.

**McGill CodeJam 12** [devpost Link](https://devpost.com/software/cv-generator) **November 2022**

* Built a CV Generator mobile app using **Java**, **Android** **Studio**, **HTML**, and **CSS**.
* Developed controller methods that take users’ information and convert it into an **HTML** webpage.

**RoboGames** (1st Place) **October 2018 – November 2018**

* Developed a robot in a team of four that detects the fire in one of four randomly placed rooms and puts it out.
* Managed the software part using **Arduino** **Uno** and participated in the hardware implementation.