# Bardia Parmoun

#### **EDUCATION**

**Carleton University** 

Sept. 2019 - PRESENT

Bachelor of Software Engineering (Co-op)

Ottawa, Canada

- GPA: 11.89/12 (3.99/4.0) | Graduation Date: 2024/04/30 | Awards: Dean's List (2020 & 2021) and Academic Scholarship
- Teaching assistant for Computation and Programming (2020 & 2023) and Data Management (2021 & 2023).

#### **SKILLS**

Programming Languages: Python, Java, C, C++, Swift, JavaScript, Bash, SQL, PHP, Go, Racket, Visual Basic

**Technologies:** Linux, SwiftUI, HTML/CSS, Bootstrap, jQuery, Node, Express, EJS, Mongo, PostgreSQL, MySQL, React, Docker

Tools: Git, Jira, Eclipse, IntelliJ, PyCharm, VSCode, Xcode, Vim, GDB

Concepts: Software Design, iOS Development, Web Development, Embedded Systems, Real-Time Systems, QA Testing

#### **EXPERIENCES**

Microsoft June 2023 – PRESENT

Software Engineer Intern

Working as part of the rendering team for The Coalition Studio.

Apple May 2022 – Dec. 2022

Software Engineering Intern - Wireless Technologies & Ecosystems

• Developed internal tools for **Tap to Pay on iPhone**, using **Swift, SwiftUI, and Objective-C**.

• Participated in the verification of a Tap to Pay on iPhone framework and its new features for iOS 16.0.

BlackBerry QNX Jan. 2022 – April 2022

Core OS Software Development Student

Ottawa, Canada

Vancouver, Canada

Montréal, Canada

- Performed various unit tests for the QNX kernel and filesystem, using C and gcov, achieving 100% coverage.
- Designed and conducted **regression tests** for the **/proc filesystem**, using **C** and BlackBerry's testing API, following **Automotive SPICE** to ensure the customer needs are being met and the components are behaving as expected.

Ross Video May 2021 – Dec. 2021

Software Developer - softGear

Ottawa, Canada

- Built two internal testing tools for the softGear team, AES67 Player and Recorder, to convert .raw audio to AES67 streams and generate custom tones, using C++, JSON, HTTP, and Docker; improved softGear's testing capacity by 20%.
- Accelerated the release of two of softGear's products, RSAP and NWE-IP, by resolving bugs and adding new features.

Nokia | July 2018 – Aug. 2018

High School Intern Ottawa, Canada

Created two calculators for Nokia's VNS/VCS services with Macros and VBA; improved sales automation.

#### **PROJECTS**

Real-Time Elevator Simulator | Java, UDP, C-LOOK, State Pattern, XML, Serialization, Swing

**April 2023** 

- Simulated an elevator control system in real-time using Java threads following the state design pattern.
- Utilized **UDP** to connect the components and implemented the **C-LOOK** algorithm to schedule the elevator requests.

#### LIBER: Online Bookstore | PostgreSQL, HTML/CSS, PHP, Apache

lan. 2022

- Developed an online bookstore website using PHP and PostgreSQL that allows users to order books online.
- Designed and implemented the database in **PostgreSQL** with proper triggers, functions, views, and procedures.

## **☑ Embedded Pong Controller** | *C, Python, Pygame, UART, GPIO, Serial*

Dec. 2021

- Made an embedded controller, using a MSP432R board and the UART protocol, for a Pong game written in Python.
- Configured the LEDs, switches, and serial port with proper GPIO and interrupts, in C, to achieve real time responses.

### **☐ Terminal Spell Checker** | C++, Bash

July 2021

- Wrote an **object oriented** program in **C++** to scan a given text for spelling errors and provide suggestions.
- Created a command line interface (CLI) with various commands for scanning the input, applying suggestions, etc.

#### **EXTRA CURRICULARS**

## **☑** Systems and Computer Engineering Society (SCESoc)

Sept. 2022 - April 2023

Vice President Academic

Ottawa, Canada

Organized and held academic workshops and events for the Systems and Computer Engineering students.