| **Chiheb Bejaoui,** BSc  Software Engineer  LinkedIn; <https://www.linkedin.com/in/no-place-like-127001/>  Website: <https://ch1heb.github.io/about/> | Toronto, ON, M4P 1L5  (437) 225-9029  [chiheb@engineer.com](mailto:chiheb@engineer.com) |
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| **SUMMARY OF QUALIFICATIONS** Through my experiences working within the start-up space, I have developed a diversified project portfolio featuring multiple technologies and frameworks. This exposure to multiple projects also gives me a wide perspective of every line of code and implementation that I undertake. Combined with the ability to thrive in high-pressure, deadline-oriented environments, I have a keen ability to deliver multiple MVP’s while accelerating time-to-market using:   | Languages | Java - C# - Kotlin - Javascript - JQuery - C++ - Shell - NoSQL - MySQL - SQLite - Python - Lua - CSS - HTML - XML - Bootstrap - QML | | --- | --- | | Tools/IDE | Android Studio - ASP.NET - Unity3D - ROS - QT Creator - FFMPEG - Axure - GStreamer - mqtt - Docker- GIT - Notepad++ - Visual Studio - bugzilla - Opencv - WebRtc - videojs - PDFjs - CKeditor - Jira – Trello – Oracle – POSTMAN – Retrofit - ROOM - Bitbucket | | Field of application | Chabot’s - AR - VR - IOT - Web Services - Web - Mobile - Linux Servers - Embedded - pentesting - Ecommerce - CMS - Payment – Game dev - Video Streaming - UX | | Hardware | esp8266 - RaspberryPi - pic16f877 - BeagleBoard - RFID - atmega328 - 3D Printers – Lidar - ARM - connectivity experience (Bluetooth / Wi-Fi / NFC / USB / TCP/IP.) | | OS | KaliLinux, Rasbian, Ubuntu, Fedora, Red Hat, Windows | | Cloud | AWS EC2- IBM Watson - GCP - Azure - Firebase - Dialog Flow | | **SKILLS**  * Android Development. * Robotics Design and Development. * Internet Of Things. * QT - QT Creator * Embedded Systems * Game Dev (AR - VR)   - RTOS   * Linux - Servers- Shell Scripting - Web Scraping (python)- ChatBots  **EDUCATION** Bachelor IT, ISETN University  AWS, Kotlin,  Scrum  Web Services,  Embedded Mobile Dev  **LANGUAGES**  English, French |

# **PROFESSIONAL EXPERIENCE**

## **Uptake** (Acquired by **Texada Software** in Apr 2023)Jan 2021 - Feb 2025

### Software Engineer:

* Maintained and enhanced multiple Android apps, implementing features and resolving issues in **Kotlin** and **Jetpack Compose**.
* Utilized **Hilt** for dependency injection to improve code modularity and testability.
* Collaborated with cross-functional teams to define API specifications and integrate third-party services.
* Debugged and optimized app performance using **Android Profiler**, **Logcat**.
* Implemented automated unit/UI tests with **Espresso**, **JUnit**, and **Mockito**.
* Managed app releases using **Firebase App Distribution**, ensuring compatibility across multiple Android versions.
* Integrated **RESTful** APIs and optimized network calls using **Retrofit** and **OkHttp** for improved app performance.

## **VTRAC Robotics** Feb 2019 - Dec 2020

### Research and Development:

* Developed Android-based consumer and service robots with AI capabilities using cloud **NLP**, **STT**, and **TTS** for task execution.
* Designed real-time remote control Android app for sanitizing robots with embedded **video streaming**, **FPV navigation** and task scheduling.
* Built an AI **ChatBot** platform with multi-channel communication (Email, SMS, etc).
* Collaborated with clients and internal teams to design and develop user-friendly websites.
* Developed website layouts using **JavaScript**, **HTML**, **JQuery**, and **CSS**.
* Coordinated team efforts for website performance, troubleshooting, and backups.
* Conducted user behavior research to optimize **HMI** and deliver an adaptive experience.
* Performed **security audits**, patched vulnerabilities, and maintained **updates** and backups.
* Translated customer requirements into technical specs for **agile sprints**.
* Wrote software requirement specs based on regulatory and design requirements for stability and scalability.
* Led technical reviews with stakeholders for feedback and approval on software and hardware solutions.

## **StreamPixel** — *Software Engineer* Jan 2017 - December 2018

### Research and Development:

* Developed an Android app with an admin dashboard to manage devices, participant sign-up, and NDA signing (**Android Studio**, **REST API**, **Room**, **SQLite**, **MQTT**).
* Implemented **video encoding** and **streaming** using **FFmpeg**, **WOWZA**, and **GStreamer**.
* Used **Azure** cloud to manage scheduled tasks for deployed devices.
* Created a payment solution for SEPA file generation, validation, and digital signature confirmation (**ASP.NET**, **SEPA Generator**, **IBAN Validation**).
* Developed an **eSignature** system for seamless automation with the payment solution (**Android**, **Web App**, **Java**, **C#**, **MySQL**, **PDF**).
* Built an **IoT** solution for data processing using **Python**, **AWS**, **MQTT**, and **Azure**.
* Developed an **SMS Gateway** using **Raspberry Pi**, **Python**, and **GSM module** for automated batch messaging with a dashboard designed and optimized **UX** with **Axure** mockups.
* Built a hosting solution (**Linux**, **CPanel**) for MVP deployment, including **video streaming**, **encoding**, **web hosting**, and remote **SMS gateway**.
* Led front-end and back-end web development with **REST services**, **SQL/NoSQL**, **video streaming**, **payment processing**, and **role management**.
* Developed embedded systems on **Linux/ARM** with **Python**, **C/C++**, and **network protocols**,
* Worked with **video encoding** (**H264**), **streaming** (**RTSP**, **HLS**), and **audio technologies**.

## **ImagineDev** — *Software Developer* February 2016 - January 2017

Research and Development:

***Game Dev (Unity3D - C#)***

* Developed cross-platform mobile apps for Android and iOS, handling all phases from concept to deployment.
* Optimized and compressed game modules for mobile-friendly deployment.
* Launched, tested, and maintained mobile games, implementing new features and functionality as per design specs.
* Integrated ad networks and third-party SDKs, and defined key technical requirements.
* Collaborated with designers and artists to enhance game content, fix bugs, and improve performance.

***Educational Robot***

(3D printing - Solidworks - Gcode - ESP8266 - Circuit design)

* Design and build of modular robots for educational purposes which is controlled by a hybrid mobile application in order to interact with the robot, design includes OTA updates and programming.
* Used design principles to deliver the POC, technology included various types of microcontrollers for validating the idea and proceed with the development testing done on ATmega328, esp8266, BLE Bluetooth, HC SR04 distance sensor, servo motors, gyroscope, Accelerometer, mpu6050 power management design, IR sensor, photoresistor.
* Integrating Bluetooth Technology to enable wireless communication between the mobile application and the microcontroller.

## **Odesk (Upwork) —** *Contractor* January 2012 - January 2014

Different types of projects including web hosting - troubleshooting

## **INTERNSHIPS**

## **Tunisie Telecom** — *Intern* January 2015 - February 2015

Research and Development:

Developed an Android Native App for Geo-localization of faulty cables and adding coordination toa remote Database (SQLite - MySQL - PHP - Java - XML - Json).

## **CCK Al-Khawarizmi Computing Center —** *Intern* January 2014 - February 2014

Research and Development:

Cisco and juniper Switches Setup and config and Troubleshooting.

# **OTHER PROJECTS AND FREELANCE**

## **Embedded and mobile - 2017**

Build and design of a retail application that communicate with the inventory management system to provide real time notification about the inventory status on the shelf of the store during the shopping hours and give insights about each needed reload in specific location using load sensors connected to an embedded board running Linux based OS which communicate with the inventory management system using microservice based architecture.

OpenCv (Python), Microservice (REST), Web (HTML, CSS, JavaScript, JQuery), Cloud (IBM Watson, AWS), IOT (mqtt, python), Camera module, Load Sensors, HC SR04, BLE.

## **Augmented Reality - 2016**

Mobile app, teaches kids animals like a virtual zoo Incorporating Augmented Reality into highly visual, interactive educational experiences It allows students to see virtual content as appearing in the real world. Unity3D, Vuforia.

## **Drone ground control station and UAV - 2016**

Design and developed a base software to allow the implementation of the remote control capability to be performed by a software in order to push full autonomy in future implementation as a graduation Project. Android Studio, Unity3D, C, C#, Lua, Web Sockets etc..

ESP8266, ATmega328p, mpu6050

## **Mobile Game - 2016**

Design and development of Mobile Game released on Android Devices. Unity3D, C#.

Developing different modules of application including menu, score calculation, levels difficulties, networking, and deployment to the store.

# **EDUCATION**

## **Higher Institute of Technological Studies of Nabeul,** — *Bachelor's degree, Information Technology*

### December 2013 - JUNE 2016

Embedded Systems and mobile applications development.

\*Evaluated and recognized by University of Toronto