# Kowalski Roch

### Education

# HE2B-ESI - École Supérieure d'Informatique

Bachelor of Software Engineering

Institut Sainte Ursule

High School Diploma, General Education

September 2021 – Ongoing

Brussels, Belgium

September 2014 – June 2021

Brussels, Belgium

## **Projects**

#### MangaLib | Source code

Kotlin | Firebase | Retrofit2 | API

- \* Developed an **Android** mobile app that enables users to track top-rated and most followed manga titles, manage their manga library, and bookmark favorites. The app utilizes the **Mangadex API** for real-time manga data and **Firebase** for database management.
- \* The app offers a variety of features, including authentication for user login and access to their personal library, management of the manga collection, browsing of the latest, top-rated, and most followed manga, and comprehensive search functionality for any manga title.
- \* The app utilizes the MVVM (Model-View-ViewModel) architectural pattern.

## Basic Tetris | Source code

C++ | Qt Widgets | CMake

- \* Developed a school project aimed at testing and solidifying foundational skills in C++, completed in collaboration with a colleague.
- \* The project was built from scratch, requiring us to create our own UML diagram to structure the project.
- \* This Tetris implementation includes both a simple console-based and GUI-based version of the game.
- \* Gained valuable insights into software architecture by designing and implementing the game's structure from scratch.
- \* The Tetris game allows users to choose the game mode, select the difficulty level, and customize the board dimensions.

#### Stib Itinerary planner | Source code

Java | SQLite | Maven | javaFX

- \* Developed a Java desktop application that allows users to plan an itinerary between two metro stations in Brussels.
- \* The application enables users to select an origin and a destination station, and save their itinerary to favorites for quick access.
- \* The search algorithm implemented to find the path between the two stations is **Dijkstra**'s algorithm.

### Technical Skills

Languages: Java, SQL, HTML5, CSS, JavaScript, C, C++, Kotlin, PHP, PL/SQL

Developer Tools: Postman, Git, Maven, Gradle, Jetbrains, VSCode

Libraries/Frameworks: Laravel, Django, JavaFX, Retrofit2, SQLite, MySQL

### Languages

French: Native Level

English: Professional Working Proficiency

- \* Scientific work conducted in English for Prometeruse(Certificate)
- \* Won 4th place at the regional level and 31st place at the national level in The BIG Challenge. (Certificate)

Polish: Native Level Japanese: Beginner Level