Victor Selegean

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GitHub
Hugging Face
LinkedIn

SUMMARY

Computer Science **graduate** with experience in **cross-platform mobile development**, **systems programming**, and **machine learning deployment**. Skilled in **C++, Java, Kotlin, Swift, and Python**, with a focus on building high-performance, reliable software. Passionate about solving complex technical problems and pursuing further studies in **high-performance computing** and **backend systems**.

WORK EXPERIENCE

- **Mobile Applications Assistant Programmer** *July 2024 - June 2025*
  Garmin, Department of Marine Applications **LinkedIn**

  – Started as an intern and continued for an additional year following performance before pursuing further studies
  – Focused on a common **C++** core of functionalities used by multiple products on both **iOS and Android**
  – Used **Java and Objective C** to expose the core functionality to the **Kotlin and Swift** applications
  – Delivered a new customer-facing feature and improved developer productivity by expanding internal tooling
  – Conducted the end-to-end development of a feature, from planning and design to implementation, testing, and demos

EDUCATION

- **Babeș-Bolyai University** *Oct 2022 - June 2025*
  Computer Science in English **Website**

  – Admitted following a Mathematics Admittance Exam where I scored **9/10**
  – Graduated an additional specialization in the teaching of computer science for secondary education
  – Finished after 3 years with a **9.43/10** average grade and taking multiple optional courses in **C Programming**, **Communication**, and **Advanced Problem Solving**
  – Graduated with a **8.95/10** grade at the graduation exam

- **Emil Racoviță National College** *Oct 2018 - June 2022*
  Mathematics and Computer Science with Intensive English **Website**

  – Admitted in 2018 following the standard national testing with a grade of **9.8/10**
  – Qualified for the **National English Olympiad** in 2019
  – Participated in **volunteering** activities related to the **Student Council** before and after the COVID break
  – Participated in the **2022 MATh.en.JEANS congress in Avignon** making a **presentation** alongside a team of students from France and Romania
  – Passed the Baccalaureate Exam in 2022 with an average grade of **9.85/10** for Romanian, Mathematics and Computer Science

TECHNICAL SKILLS

- **Programming Languages**:
  Worked professionally with **C++, C, Java, JNI, Objective C, Kotlin**, and **Swift**
  Built projects with **Python**, **C#/.NET, Javascript**, and **Typescript** during university
  Solved problems and built small projects with **Lisp, Prolog, MatLab, SageMath, and Flutter**
- **Frameworks**:
  Used **PyTorch, Transformers, FatAPI, JetpackCompose** for Bachelor's degree project
  Graduated the **MSG Web Development Bootcamp** focusing on **Angular** and **Java Spring**
  Built and deployed **React** and **Java Spring** application as part of university coursework
  Created desktop GUIs with **Qt**, **JavaFX**, and **WPF** as part of university coursework
- **Tools**:
  Used **Git** for version control and collaboration
  Integrated projects in **GitHub** and **Gerrit** for code review
  Set up **Jenkins** jobs for continuous integration and deployment
  Used **grep, sed, awk, and other Unix system utilities** for processing text
- **Databases**:
  Created and managed relational databases with **PostgreSQL, MySQL**, and **Microsoft SQL Server**
  Certified **Oracle** Database Administrator in 2022
  Managed object storage through **S3**

- **Projects and Optional Courses**:

  Participated in a team of students building an **Emotion-Based Song Lyric Generator** for Understanding and Developing Large Language Models

  Deployed a **Dockerized** application on **AWS** for Cloud Applications Architecture
- **Languages**:

  Native Speaker of **Romanian**

  Cambridge **English**: Advanced, grade A (level **C2** - 207/210) from July 2021

PROJECTS

- **Enhancing Romanian Automated Speech Recognition using Multilingual Training Data**   *October 2024 - June 2025*

  Bachelor's Thesis Project   **Website**, **Hugging Face**

  - Pipeline using **PyTorch, Transformers, Datasets** to generate training data, **fine tune** `openai/whisper`, and benchmark different models
  - Best performing model deployed on **InferenceEndpoints**
  - **Dockerized FastAPI** application deployed on **AWS EC2** to handle security and interact with **S3** storage
  - Android **JetpackCompose** application for sending data to the model and displaying results

- **Decentralized Peer to Peer Chat Application**   *October - December 2024*

  Principles of Performance Oriented Coding Course   **Github**

  - Used **Java, Gradle, Gson** to create a peer-to-peer chat using a **custom communication protocol** and **sockets**
  - Made use of complex synchronization mechanisms to create a robust and reliable application

- **.NET Collective Project**   *March - June 2024*

  Software Engineering Course   **Github**

  - **Lead a team of students across a semester**, figuring out ways to work in a competitive environment
  - Got familiar with **C#, Design Patterns and Version Control Systems**
  - Had to develop and make use of **leadership, teamwork**, and **conflict management skills**
  - Developed an in-house ORM for our application domain

- **Programming Language Parser**   *October 2023 - January 2024*

  Advanced Programming Methods Course   **Github**

  - Extended an university project by adding support for parsing a custom programming language
  - The language supports repetitive instructions, scope management, multiple threads of execution, and garbage collection

- **TTRPG Combat Balancer**   *August 2025*

  for the Mörkborg game   **Website**

  - Simulate combat between parties of players and different enemies
  - Built using **Vite**, **React**, and **TailwindCSS**, deployed using **Vercel**

VOLUNTEERING

- **Erasmus Buddy System**   *September 2023 - July 2025*

  Local Buddy   Cluj-Napoca

  - Acted as a local guide and friend helping 3 Erasmus students from Germany and France accommodate to Cluj-Napoca and UBB

- **Erasmus Student Network**   *October 2023 - February 2024*

  HR Volunteer   Cluj-Napoca

  - Organized regular cultural exchange events for volunteers, including book clubs and movie nights