Ilie-Alex **Petrică**

Computer Science · STUDENT
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Education

University Politehnica of Bucharest   *Bucharest, RO*
BS Computer Science   *Sep. 2019 - Present*
Current GPA– 9.45/10   **Expected Graduation Date – June 2023**

Coursework: Linux Operating System, Numerical Methods, Data Structures & Algorithms, Object-Oriented Programming, Analysis of Algorithms, Communication Protocols, Algorithm Design, Programming Paradigms, Assembly & low-level programming, Computer Programming, Computer Architecture, Parallel Programming, Local Networks, Computer Graphics, Relational Databases, Embedded Systems.

Ovidius Theoretical High School   *Constanta, RO*
Mathematics and Computer Science   *Sep. 2015 - June 2019*
· Finished high school with an overall grade of 9.70.
· Had an overall grade in the Romanian Baccalaureate of 9.78, with 9.75 in Literature, 10 in Maths, and 9.6 in Physics.

Work Experience

University Politehnica of Bucharest   *Bucharest, RO*
Undergraduate Teaching Assistant – Assembly & low-level programming   *Feb. 2022 - Present*
Writing and reviewing the laboratory materials and setting automatic checkers for home assignments. Teaching about the hardware/software interface to 2nd-year students. Contributing to the examination process by developing exam subjects and grading schemes.

Logiscool Muncii   *Bucharest, RO*
Trainer   *Sept. 2021 - June 2022*
Being a trainer developed my ability to work as a team, solve multiple tasks, have patience, to communicate with every kind of character as I found myself not as a simple trainer, but as a developer and a model for attendants, which enhanced my critical and objective thinking, but also my team management and leadership skills.

Skills

Programming languages/Frameworks C/C++, Java, Python, Spring, JavaScript (beginner), Bash (beginner)
Web technologies HTML&CSS
Tools AWS, Pandas, Boto3, Git, Parquet, REST API, MongoDB, Terraform, Postman, Linux, Windows
Languages Romanian (native), English (advanced), French (beginner)

Projects

J.P Morgan Code for Good Hackathon
Developed an application for nonprofit organization Speak Out Scotland which helps the survivors of childhood sexual abuse to rehabilitate. My team used **React & Spring** to create a website where users could respond to questions related to their problems, view videos or materials, to see their progress until a person of SOS could treat them. They also could see the feedback from people who had the same disease as them and how they were cured, to give them motivation. My role was in the backend where I learned **Spring Boot** in 24 hours thanks to my mentor's guidance. I made **models, rest controllers & services** for classes Users, Materials, and Syndromes which were the main classes of our app. We connected the front with the back using **JSON.** Also tested it with **POSTMAN** until the front was ready.

We are hiring
Build an application in **JAVA** that works like a database for multiple companies where you can sign **(it has an authentication protocol)** as a manager, an employee, or an applicant. You can see as manager and employee who applied to your company, the details about the other employees (it has a page dedicated to searching & show information from resumes), and a page for the manager where he sees the requests (applications) for jobs in his company and he can accept or denied those. For applicants, there is a notification page where you can be notified if a company you are interested in opens a position or if you were accepted/denied for a position. The input was parsed using **JSON** files and the interface was made using **Swing**.

TCP/IP Protocols
A series of applications developed in **C** language: Subscribe – a client-server app with TCP, UDP, and Python that simulates a subscription mechanism where clients can subscribe to different topics and get news about them **(even whether they were connected to the server or not at the moment the news were sent they will get the news when they will reconnect)**; E-Library – A CLI client that performs HTTP requests to a REST API Server; Router – IP, ICMP, and ARP protocols.

Contests/Awards

- Participated at Regional Olympiad in Informatics.
- Oracle Academy, Database Design and Programming with SQL Certification.
- Participated in NASA Space Settlement Contest.