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in LinkedIn | ○ GitHub | ▮▮ Codeforces

Alexandru Olteanu

PROFILE

▪ Detail-Oriented Software Engieer with comprehensive understanding of Java, Spring Boot, C++, JavaScript, SQL and data analytics concepts. Dedicated to continuously learning new programming paradigms, exploring innovative ideas and tools in the technology sector as well as utilizing advanced coding and debugging skills to tackle complex challenges and drive project success.

WORK EXPERIENCE

Java Software Engineer   **July. 2022 – Current**
Deutsche Bank Global Technology   **Bucharest**

▪ Developed and migrated new code features in Java for microservices in relations with SQL database, Tibco server and TeamCity.
▪ Developed error handling mechanisms from scratch and successfully integrated them with external services.
▪ Refactored extensive functionalities and improved code quality by 18.5 %
▪ Wrote unit and integration tests to evaluate high code coverage.
▪ Enhanced experience in working with Spring Boot, Maven and OpenShift

Highschool Mentor   **Oct. 2021 – Current**
Personal Activity
Bucharest

▪ Mentored students and high scholars on science domain, particularly in Mathematics and
Programming (C /C++, Java)

Freelancer   **Mar. 2020 – Oct.2022**
Fiverr, Upwork, Freelancer   **Bucharest**

▪ Improved my communication and expertise through working on different freelancing websites. My area of activity was mainly into marketing research, WordPress websites, multiple C++ and Java activities and designing in Adobe Illustrator and Photoshop.

PERSONAL PROJECTS

SwapIt – University Thesis Project

▪ Developed a fully functional application designed to promote a circular economy by facilitating easy and secure object swapping between users. This three-tier application features a frontend built with React.js, a backend powered by Spring Boot with Java, and PostgreSQL for database management. The architecture is based on microservices, incorporating key concepts to ensure a fast and robust solution:

- **API Gateway:** Serves as the main security point.
- **Authentication:** Utilizes JWT Token or OAuth2 for secure user authentication.
- **Config Server:** Manages configuration for all microservices.
- **Firebase Integration:** Stores product and user images.
- **Second-Level Cache:** Implemented at the database level for faster data access.
- **Custom Error Handling:** Provides improved exception management.
- **Lucene Library Integration:** Enhances search results for misspelled queries
- **Scheduled Operations:** Removes temporarily available data at scheduled intervals.
- **Pagination:** Uses Spring Boot Pageable for efficient data retrieval.

As a result, the application delivers fast response times (approximately 114 ms) while managing over 60,000 products.

Nevsquare

▪ Founded a Marketing Agency & Tech Startup. The website was created with React.js, Bootstrap, and Typescript The design was made both for PC and tablet/mobile responsive with interactive animations and Tidio Chat Bot integrated. Practiced my front-end skills and carefully planned future market releases and backend integration. Planning on adding Log In / Sign Up and Payment Option.

Server-Client TCP/UDP Connection

▪ Implemented a connection between multiple clients through a Server using UDP and TCP protocols. First type of clients simulates different types of news channels where the other type of clients can subscribe and receive their messages. The flow was created in C++ using sockets, listening for information of the server on different ports and multiple data structures.

Movies, Actors & Users Database Management

▪ Organized and implemented an extensive database for movies, actors and users using Java OOP principles with over 1000+ lines of code. This project represents a possible backend integration of popular stream websites like Netflix, HBO GO, Twitch, etc. In this project actions like filtering movies on categories, adding users, actors, movies, sort them based on different filters, etc.

Router Simulator

▪ This project was made in C and simulates the functionality of a router and how it redirects the packets received from one host to another. Communication protocols that were used are ARP and ICMP, ARP having the role to discover new interfaces and their MAC address (ARP request) and send back information to the eminent (ARP reply). and ICMP to display the progress of packages that reach or not the required destination. Current project aims to develop C programming skills and how packages transmission works in a real and day to day environment.

EDUCATION

Politehnica University of Bucharest   Oct. 2024 – Current
Automation and Computer Science   **Master of Computer Science**
Master of Science in Digital Governance and Innovation

▪ Attending advanced studies in e-Government, focusing on cloud computing, adaptive and collaborative systems, information security, and project management. I am currently developing skills in decision-making processes, distributed systems, and consultancy for information services. Actively involved in comprehensive research projects and hands-on applications, gaining practical experience and in-depth knowledge throughout the program.

Politehnica University of Bucharest   Oct. 2020 – July. 2024
Automation and Computer Science   **Bachelor of Computer Science**
Computers and Tehnology Information

▪ Pursued programming and engineering classes, developing towards skills in Java, C, C++, Assembly, Python, MATLAB, LTSpice, Git and practicing multiple computer science concepts (Object Oriented Programming, Algorithms Analysis, Communication Protocols, Parallel and Distributive Algorithms, SQL, Multithreading, Game Development Concepts in OpenGL)

ACOMPLISHEMENTS & AWARDS

▪ Qualified for nationals and got in the top 15% in the team format of ACM-ICPC 2023.
▪ Qualified for nationals in informatics Olympiad, getting second place in the previous round.
▪ I got great results in multiple programming competitions organized on Codeforces, Hackerrank and Codechef, having Expert rank on Codeforces and 5 stars rated coder on Codechef.
▪ I got in top 10% in Facebook Hacker Cup 2023 and top 4% in Codechef SnackDown 2023.
▪ Got into the Finals of Hack IT All competition organized by University Politehnica of Bucharest