

Dear Recruiter,

I am a third-year student at the Technical University of Cluj-Napoca, majoring in Computer Science and Information Technology, and I would like to express my interest in IT opportunities. I am passionate about technology and eager to develop my knowledge and skills through practical projects and teamwork.

One of my most significant projects is the **Formula 1 Grand Prix Simulation (OpenGL)**. In this project, I developed a 3D Formula 1 circuit simulation featuring dynamic vehicle animation, real-time lighting, and environmental effects. The goal was to create an immersive and realistic racing experience, utilizing OpenGL to render complex graphical elements and simulate real-time interactions.

The **Polynomial Calculator (Java, Swing)** is a graphical calculator that supports arithmetic operations, regex-based input validation, and follows the MVC architecture. This project improved my understanding of Java GUI development and design patterns, particularly in structuring scalable and maintainable applications.

I also designed a **Queue Management System (Java, Multithreading)**, a multithreaded system with real-time graphical updates, optimized queue allocation, and statistical tracking. The project focused on thread safety, synchronization, and efficient resource management, ensuring smooth handling of multiple concurrent requests.

Additionally, I developed an **Order Management System (Java, MySQL)**, an application for warehouse management with CRUD operations and reflection-based database queries. This project strengthened my ability to work with databases, optimize queries, and implement a layered software architecture for better maintainability.

My work on the **Medical Clinic Management System (MySQL, Java)** involved building a database-driven application with stored procedures, triggers, and role-based access control. The system was designed to manage clinic operations securely and efficiently, allowing different users to interact with medical records according to their access privileges.

To explore low-level programming, I created a **Tic-Tac-Toe game (Assembly x86)** with a graphical interface. This project deepened my knowledge of assembly language, memory management, and hardware-level programming principles.

I also worked on **Efficient Sensor Data Processing (Arduino, Windows Forms .NET)**, where I implemented optimized Z-Score calculations for sensor data on microcontrollers. The processed data was visualized through a .NET application, allowing real-time monitoring and analysis of sensor readings.

I have experience with C/C++, Java, Python, C#, MySQL, and VHDL, along with expertise in algorithms, data structures, databases, and object-oriented programming. I am a motivated individual with strong problem-solving skills and the ability to adapt to various challenges.

I would be delighted to discuss further how I can contribute to your team. Thank you for your time, and I look forward to a potential collaboration.