Suciu Andrei

Student

BIO

personal

Suciu Andrei
Nationality: Romanian
2003
Cluj-Napoca

Areas of specialization

- Hardware Design
- System-Level Programming
- Embedded Systems Development
- Back-End Development

SKILLS

Languages

Romanian	C2	mother tongue
English	C2	
German	A2	

IT & programming

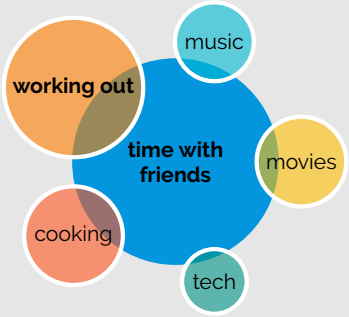
- **Java**
- **C/C++**
- **VHDL**
- **Python**
- **LaTeX**

OS:

Soft Skills

- **Teamwork**
- **Creativity**
- **Leadership**
- **Socializing**

Interests



About me

I am a student at the Technical University of Cluj-Napoca, currently pursuing a Bachelor's degree in Computer Science. I enjoy exploring all things related to computing, especially System-Level design and programming. Throughout my studies, I've learned a multitude of programming languages, but above all, I've developed the necessary skills to collaborate on large-scale projects as part of a team. My friends often describe me as someone who is eager to strike up a conversation and open to new experiences. I've often found success by staying consistent, disciplined, and never giving up on my goals.

"Luck is when preparation meets opportunity."

– Seneca

Short Résumé

Education

2022-Present **Technical University**
Computer Science
Cluj-Napoca

2018-2022 **Avram Iancu High School**
Mathematics and Informatics
Cluj-Napoca

Certificates

- **Baccalaureate** Certificate
- **Cambridge** Certificate in Advanced English
- **Oracle** Certificate in Database Design
- **B2** Driver's License

Projects

2025 — **Floating-Point ALU**
- Design and FPGA implementation
- Used tools: VHDL

2024 — **Automatic Water Dispenser**
- Voice-activated dispenser for Arduino
- Used tools: C, Arduino

2024 — **Queue Management**
- Multithreaded queue simulation
- Used tools: Java, JavaFX

2024 — **Polynomial Calculator**
- Desktop application for calculating polynomials
- Used tools: Java, JavaFX, Regex

2023 — **Macro Buddy**
- Desktop application for tracking calories
- Used tools: Java, JavaFX

Academic Achievements

2024 **Performance** Scholarship in third year of study at university

2024 **9.21** Average mark in second year of study at university

2022 **9.51** Average mark at the Baccalaureate exam

Suciu Andrei Cluj-Napoca +407 771 420 908 Linked-In
sams200@protonmail.com Github

Suciu Andrei

Academic and Personal Projects

Floating Point Arithmetic Logic Unit

As part of the Structure of Computer Systems laboratory, I was tasked with designing a Floating Point Arithmetic Logic Unit capable of performing addition and multiplication. After researching floating-point arithmetic, I created an initial prototype using a behavioral style.

I then refined the design and created a schematic, which I used to translate the project into a fully structural design. I further optimized it by reducing the number of components used and improving computing algorithms to minimize the necessary clock cycles.

For demonstration purposes, I implemented the design on a Basys3 FPGA. The final design performs floating-point multiplication in approximately 11 clock cycles and addition in about 10 clock cycles. The project was praised by the lab assistant for its complete structural design and for the efficiency with which it performed.

Tech Stack:

- VHDL, Vivado
- Draw.io
- LaTeX

Macro Buddy

For both the Object-Oriented Programming and Databases courses, I was required to implement a Java desktop application that used a custom-designed database. After some brainstorming, I decided on an application dedicated to tracking macronutrients.

I designed a basic database schema to store all relevant items, taking into account functional requirements, normal forms, data integrity, and the scalability of the project.

Next, I set up a Java connection to the database and created repositories for each entity, with the appropriate CRUD operations. I then applied a Model-View-Controller (MVC) architecture for the rest of the project. The front-end was built using JavaFX and FlatLaf, resulting in a modern and easy-to-use user interface. The application enforces data integrity at multiple layers—front end, Java backend, and database. Data is validated at each stage, with user-facing error messages to highlight invalid inputs. The database further rejects any invalid data, ensuring full system reliability.

Although I knew this project would surpass the course expectations, I invested additional time to create a complete, high-performing, and user-friendly application. The end result is an app more than capable of rivaling other similar applications on the market.

Tech Stack:

- PostgreSQL, JDBC
- Java, JavaFX, FlatLaf
- Docker

Suciu Andrei Cluj-Napoca +407 771 420 908 Linked-In
sams200@protonmail.com Github