

Bara Norbert

Email: baranorbi12@gmail.com
GitHub: github.com/baranorbi

Summary

Computer Science student with advanced full-stack development skills and experience across numerous programming paradigms. Diverse projects ranging from web applications to game development. Passionate about solving real world problems and expanding technical expertise with up-coming technologies.

Education

Universitatea Babeş-Bolyai din Cluj-Napoca (2023-present)
BSc Computer Science

Colegiul Național Nagy Mózes din Targu Secuiesc (Graduated 2023)

- 2nd Prize in OTI 2023 (C#)
- Participated in numerous mathematics and programming competitions

Technical Skills

Programming Languages:

Python, Java, C/C++, C#, JavaScript, TypeScript, Assembly (x86/x86-64), Prolog, Lisp, MATLAB, Bash, SQL, Lua, AWK

Markup Languages:

HTML, Markdown, CommonMark, CSV, XML, Mermaid

Frameworks & Technologies:

- **Frontend:** Vue, React, Tailwind CSS
- **Backend:** Django, ASP.NET Core, Django REST API
- **Databases:** PostgreSQL, SQLite, Microsoft SQL Server, MongoDB
- **ORM:** Entity Framework, TypeORM
- **DevOps:** Git, Vercel, Unix Shell
- **Package Managers:** npm, pnpm
- **Testing:** PyTest, Vitest, Moq
- **ML/Data Science:** TensorFlow, PyTorch, scikit-learn, pandas, NumPy
- **Other:** Firebase, Unity, Cisco Packet Tracer

Projects

Full-Stack Events Manager (In Progress)

- Developing a web application with Vue frontend and Django REST API backend
- Implementing PostgreSQL database integration
- Utilizing modern development practices with Vite

Hospital Management Application (In Progress)

- Building a WinUI application using C# and MVVM architecture
- Working in a team environment with defined milestones
- Implementing complex business logic for hospital management

Toy Language Interpreter

- Developed a language interpreter in Java
- Implemented lexical analysis, and interpretation phases
- Demonstrated understanding of compiler design principles

Concurrent Client Chat Application

- Created a console-based chat application supporting multiple concurrent clients
- Implemented in Python with socket programming and threading
- Focused on handling race conditions and ensuring thread safety

Snake Game

- Developed a console-based Snake game in Python
- Implemented game mechanics, collision detection, and score tracking

Unity Chess Variant (2023)

- Designed and implemented a custom chess variant using Unity game engine
- Applied object-oriented design principles and game development patterns

Languages

- Hungarian (Native)
- English (Cambridge C1 Certified)
- Romanian (Comprehension)

Interests

- Game Development
- Exploring New Technologies
- Computer Science Theory