

BUHA TUDOR - MIHAI

Phone: (+40)774 660 245 — [Email](#) — [LinkedIn](#) — [Website](#)

Education

Babeş-Bolyai University, Cluj-Napoca, Romania - Bachelor's in Computer Science

Oct 2023 - June 2026

- **Relevant Coursework:** Object-Oriented Programming, Data Structures and Algorithms, Operating Systems, Computer System Architecture, Computer Networks, Databases, Advanced Programming Methods
- **Research focus:** **Machine Learning** and **Artificial Intelligence**, including applications in predictive modeling and AI-driven game development
- Placed within the **first 10% out of 200** students based of first-year academic results.

Emanuil Gojdu National College, Oradea, Romania - Mathematics and Informatics

Sept 2019 - June 2023

- **Specialization:** Intensive Informatics, focusing on programming, algorithms, and problem-solving.

Personal Projects

([Battleship Warfare](#)) (Human VS AI)

- Created a **Python** based Battleship game using **object-oriented programming** and **layered architecture** to deliver a highly engaging user experience.
- Implemented a strategic computer opponent with a **75% hit success rate** after identifying part of a ship, utilizing advanced algorithms for smarter gameplay.
- **Enhanced game accuracy by 40%** through a probability grid system and **reduced game time significantly** by optimizing memory usage and game flow.

([Personal Website](#))

- Built a fully responsive portfolio website (buhatudor.com) using **HTML**, **CSS**, and **JavaScript** to display key projects and skills in a clean, professional design.
- Adapted the website for optimal mobile performance by implementing **Media Queries**, achieving a **40% improvement in layout responsiveness** across different devices validated through extensive testing by a number of volunteers.
- Emphasized efficient coding practices to enhance performance and accessibility, providing a fast and intuitive user experience. Designed the project to be scalable, allowing for future additions.

([FilmVault](#))

- Developed a cross-platform movie database management application using **C++** and **QT Designer**, allowing users to manage movie records efficiently with an intuitive **GUI**.
- **Optimized application performance** to handle large datasets and achieved **98% test coverage**, ensuring reliable functionality and improving data retrieval times and user interactions.
- Designed and implemented a user-friendly **graphic user interface** supporting movie **search**, **filtering**, and **sorting**, with built-in **undo/redo** functionality to enhance data management flexibility and user experience.

Extracurricular Activities

Informatics Excellence Center

- Actively involved in a local excellence center dedicated to informatics, participating in advanced projects and fostering a collaborative learning environment. Solved 200+ **advanced data structures and algorithms problems**.

Informatics and Computer Science Tutor

- Provided tutoring in informatics for teenagers, guiding them through programming concepts, algorithms, and problem-solving techniques to enhance their skills and interest in computer science.
- Achieved 100% success rate, with all students I mentored achieving scores above 9 (out of 10) at the Baccalaureate Informatics exam, reflecting exceptional teaching effectiveness.

Awards and Certifications

-
- **Certifications:** IC3 Digital Literacy Certification (Global Standard 5), DELF French Language Certification (B2)
 - **Udemy** course in Machine Learning and AI, covering data analysis, predictive modeling, and algorithm development.
 - **Multiple awards** at National and Regional Informatics Competitions, along with **prizes at hackathons**, showcasing perseverance in programming, problem solving, teamwork and innovation.

Technical Skills

Strong background in **Data Structures and Algorithms**

Technologies: Python, C++, Java, C, C#, Assembly, MySQL, HTML5, CSS, JavaScript

Tools & Frameworks: Git, Qt Designer, TensorFlow, Pandas, NumPy, Matplotlib, Scikit-Learn