Darius Dima



Professional experience

Software Engineer

at Robert Bosch Engineering Center

- Built and rolled out an AI Code Reviewer for our codebase; reduced manual review overhead and accelerated delivery for developers.
- Contributed in Generative AI for Software Development communities (20% time); advocated **GitHub Copilot** and agentic workflows.

2022 -

■ Delivered features across the web stack: **Angular** (frontend), **C#/.NET** APIs, **MongoDB**.

Present Clui-Napoca,

RO

- TesserHub accelerator: validated and implemented a new automotive safety function; led an innovation initiative in my department.
- **Completed the Hugging Face Agents Course**; built a local-LLM agent with **Qwen-32B** using LangGraph and LlamaIndex to tackle complex domain questions.
- Published "Introduction to RAG Systems" in Today's Software Magazine (TSM); opensourced an end-to-end **RAG** implementation in Python (see GitHub).
- Agile, cross-functional development for safety-critical automotive software in a multinational team.

EDUCATION

Bachelor's degree, Computer Science

at University of Bucharest

Focus: OOP, Data Structures Algorithms, AI, Deep Learning, OS, Web.

2021 Built hands-on products blending robotics (Arduino), CAD (Fusion 360), and software; en-Bucharest, trepreneurial, user-focused mindset. RO

Thesis: Augmented Reality multiplayer strategy game (Unity, C#).

Bachelor's degree, Orthodox Theology

at University of Bucharest

2019

- Bachelor's degree in patrology with grade 9.25 out of 10.
- Bucharest, The faculty helped me deepen my knowledge about the Orthodox Christian philosophy and to RO enrich my perspective on the reality.

SELECTED PROJECTS

- End-to-end RAG System (Python): Local RAG pipeline (LM Studio + FAISS): ingestion, chunking, retrieval, re-ranking, and evaluation.
- → AI Code Reviewer (internal, Bosch): LLM-assisted static reviews with repository context; reduced review time and flagged risky changes early.
- Local LLM Agent (LangGraph & LlamaIndex): Qwen-32B running locally; tool-augmented reasoning to answer complex domain questions (Hugging Face Agents Course).
- Arduino Matrix Game: Retro Bomberman console, dual controllers; designed in Fusion 360, 3D printed.
- Self-balancing Arduino Motorbike: PID-stabilized, radio-controlled motorcycle; designed in Fusion 360, 3D printed.
- T Image Classification (Kaggle):Pulmonary CT vessels; SVM, CNN, ResNeXt101-32x8d + FC head; **74.29**% vs required **39.38**%.
- Data Structures in C++: Templated headers: List, AVL tree, etc.

SKILLS

LLMs RAG LangChain/LangGraph **Prompting** AI/ML

PyTorch Vector DBs

C#/.NETDocker Git Backend & Infra : Python TypeScript HTML/CSS Frontend Angular OOP**Data Structures Design Patterns** Core CS

Unity Fusion360 (CAD) Arduino **LATEX** Tools

Languages Romanian: native English: working proficiency