Cluj-Napoca, RO

Darius Dima

+40 771 409 126
darius.dimaa@gmail.com
Github LinkedIn

Professional experience

Software System Engineer at *S.C. ROBERT BOSCH S.R.L.*

2022 - Present
Bucharest, RO

- I worked in an **agile** environment within an exceptional **multinational team**.
- I interviewed and mentored students.
- I joined the TesserHub accelerator and, together with my team, we validated and implemented a new safety function for cars. I also lead an innovation initiative within my department.
- I was proactive in my professional development by dedicating 4 hours per week for learning.

Data entry, validation and processing operator at *S.C. DATAMONDIAL S.R.L.*

2017
Galaţi, RO

- I learned to type faster and pay more attention to details.

Studii

Bachelor's degree at *Faculty of Mathematics and Computer Science, University of Bucharest*

2021
Bucharest, RO

- During this period, I discovered my passion for robotics, at the optional corse "Introduction to Robotics with Arduino" and I participated online in the 3D Modeling and Printing course (see **homeworks**) what inspired me to buy a 3D printer.
- Other subjects that inspired me are: **Object Oriented Programming**, **Data Structures and Algorithms**, Computing Systems Architecture, Operating Systems, Graph Algorithmics, Web Techniques, **Artificial Intelligence** and the optional **Deep Learning course**.
- In the end, I supported the license in the field of **Augmented Reality**, and I designed an **android application** that represents a **multiplayer strategy game** in **Unity** using **C#**.

Bachelor's degree at *Faculty of Orthodox Theology Justinian Patriarch, University of Bucharest*

2019
Bucharest, RO

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

Proiecte

- **Arduino** Matrix Game: **Gaming console** with two controllers equipped with a **3D printed** case made of several components modeled in **Autodesk Fusion 360 (CAD)**. Runs a retro version of the **atomic bomberman** game in single player mode (vs **AI**) or in two players (PvP).
- **Machine Learning** Classification: Kaggle competition for **image classification** of pulmonary tomography images with three types of blood vessels: native, arterial and venous. I used Support Vector Machine (**SVM**), Convolutional Neural Networks (**CNN**) and I modified the **Resnext101_32x8** model by adding four fully connected layers. I obtained the accuracy of 74.29%, well above the **required 39.38%**.
- **Data structures în C++:** **Header file in C++**, containing **classes with templates** implementing useful **data structures (List, balanced tree AVL, s.a.)**.
- **Arduino** Bike: A 3D printed **motorcycle** (with *headlights*, *taillights*, *signals*, etc.) that **maintains its balance** (using PID), controlled by **radio**. The **remote** had a Joystick (direction) and a button (horn).
- **AI** Pygame: **GUI game** on a variable size board, playable between *two players*, against *AI* or *AI vs AI*. The computer moves using the *Min-Max* or the *Alpha-beta* oprimized version, chosen from the main menu.

Aptitudes

Programming	:	**C \C++ C# Python Javascript**
Markup	:	**LaTeX HTML CSS**
Concepts	:	**Data Structures OOP Design Patterns**
Technologies	:	**Git Docker pyTorch (Deep Learning)**
Software	:	**Arduino Fusion360 (CAD) Unity**
Languages	:	**Romanian:** nativ **English:** working proficiency