Darius Dima



Professional experience

Software System Engineer

at S.C. ROBERT BOSCH S.R.L.

2022 -

■ I worked in an **agile** environment within an exceptional **multinational team**.

Present

I interviewed and mentored students.

Bucharest, RO

- 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 day for learning.

2017

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

Galați, 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 Bishop, University of Bucharest

2019

- Bucharest, Bachelor's degree in patrology with grade 9.25 out of 10.
- RO
- 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

C \C++ Programming : **C**# Python **Javascript**

HTMLCSS Markup **L**T_EX

Concepts **Data Structures** OOP **Design Patterns** Technologies Git Docker pyTorch (Deep Learning) Fusion360 (CAD) Arduino Unity Software Languages : Romanian: nativ English: working proficiency