MARIA TÎMBUR

mariatimbur27@gmail.com +40725755357
github.com/mariatmbr

Education

University "Politehnica" of Bucharest, Faculty of Automatic Control and Computer Science:
Expected graduation date – *July 2023*
Computer Science and Engineering Department: Bachelor's degree, 2nd year
First year **GPA**: 9.57/10
Relevant Coursework: Computer Programming, Data Structures, Object Oriented Programming, Linear Algebra, Numerical Methods, Probability Theory, Introduction to Operating Systems (Linux);
Extracurricular Courses: D Summer School – *2020*, Industrial IoT on Google Cloud Platform – *2020*, GirlsGoIT STEM Summer Camp – *2019***,** Django Girls – *2019*, Rails Girls – *2018*, Django Girls – *2018*;

Projects & Experience

Logiscool, Programming Trainer: *September 2020 – Present*

- Teaching children aged 7 to 12 the basics of computer programming (conditions, functions), using **Scratch**. For those who are more experienced, there are **Javascript** courses.

Academy Network: *May 2020*

- (Team project – 2 members) Built a system that aggregates information about **100k+** scientific articles and responds to queries using the latest saved data. Moreover, I implemented an efficient way to get the most cited papers by field and to get the number of papers between dates. Used a **JSON** parser to process the articles.
- Used **Hash-tables**, **Algorithms** topics, such as: Breadth First Search, Depth First Search; and Data Structures, including: Graph, Queue, Hash-table, in order to optimize the queries. The project was written in **C**.

PageRank: *March 2020 – April 2020*

- Simulated a low level PageRank algorithm, using the link structure of the Web.
- Implemented in **MATLAB** the Iterative and Algebraic Algorithms. As a result, they would provide the degree of affiliation of the link.

Count-distinct problem: *March 2020 – April 2020*

- Using hash-table with open addressing **Linear Probing** in **C**, I implemented a program that finds the frequency of a word from a given text.
- Worked with the Probabilistic counting theories, for instance, **LogLog** and **HyperLogLog** algorithms in order to approximate the number of distinct elements in a multiset.

K-means clustering & Householder prediction: *February 2020 – March 2020*

- Completed an interesting project based on clustering algorithm in **MATLAB**, which partitioned points into **clusters** by finding the nearest centroid (cluster's center) for every point.
- Classified **thousands** of images with cats, using **RGB**/**HSV** histograms and **QR Factorization**, achieving a **87.5%** accuracy rate in a short amount of time.

Skills

Programming

- Good knowledge: C, Linux/Unix shell, bash scripting;
- Intermediate: C++, MATLAB, CSS, HTML;
- Beginner: Java, Python, Assembly, D, Git;

Other

- Fluent in English (FCE - B2), French (DELF - B2), Russian (Bilingual), Romanian (Native)

Awards & Achievements

- During High School, I participated every year at the **National Mathematics Olympiad** and obtained a **honorable mention** in *2016*.
- Volunteering for "**GirlsGoIT**" community since *2019*; organizing Bootcamps in my hometown and spreading love for **STEM among women** in my country.