# Yusif Mehdiyev Musa

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Joseph Mehdiyev in Joseph Mehdiyev

Azerbaijan, Baku

# **OBJECTIVE**

I am seeking new internship opportunities and practical knowledge in Data analytics, Data Science and Machine Learning for my future career. I am aiming to contribute to innovative projects and learn experience in my field.

## **EDUCATION**

• ADA University 2024 - Since

Bachelor of Science in Mathematics

Baku, Azerbaijan

Baku, Azerbaijan

• Rector's List of Honor

Full Secondary School Numbered 12

2013 - 2024

Secondary Education

o GPA: 3.95/4.00

• SAT: 1500/1600

• 11th grade National Exam: 281/300

9th grade National Exam: 262/300

9th grade Honor's Degree

# **PROJECTS**

Cormat: 3D math software from scratch

March 2024 - Since

Tools: C++, Cmake, OpenGl, GLFW, ImGui, GLSL shaders

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Developed OpenGL pipeline system to render the mathematical graphs

- $\circ$  Implemented various algorithms and data structures for various purposes
- Implemented Object Oriented Programming structure to organize the project
- Planning to use advanced mathematical skills to optimize the rendering and improve the aesthetical quality of the project

## **PUBLICATIONS**

## Probability and Statistics with R and Python

March 2024 - Since

A notebook style amateur open-sourced book written for educational and personal purposes

- Talks about Probability Theory, Statistical Inference and its methods, various Statistical models, Simulations and Math behind Machine learning.
- Includes coding examples in Python libraries such as pytorch, scikit-learn, scipy and R using tidyverse packages.

#### **SKILLS**

- Mathematical Knowledge: Pre-Calculus, Calculus, Linear Algebra, Elementary Graph Theory, Elementary Number Theory, Probability and Statistics, Mathematical Analysis
- **Programming Languages:** C, C++, Python, R, Lua
- Database Systems: PostgreSQL
- Data Science & Machine Learning: R tidyverse packages, python libraries (beginner): pytorch, scikit-learn, scipy, matplotlib, pandas, scipy, beautifulsoup4
- DevOps & Version Control: Git, Cmake, Docker
- Language Knowledge: Azerbaijani (Native), English (C1), French (A2)
- Other Tools & Technologies: Latex, Linux (arch and debian based), Microsoft Excel, RStudio



## **CONTESTS AND AWARDS**

# • CodeForces Competitive Programming Contests

Practicing Competitive Programming skills periodically

May 2024 - Since



- Learning new algorithm concepts and implementing them quickly
- Participating in contests all the time to gain more experience about CP
- Implementing new code techniques and improving coding skills

# · Azerbaijan olympiads blogger

Art of Problem Solving Forum

April 2021 - June 2022

September 2021 - June 2022



- Shared math olympiad problems used in Azerbaijan camps.
- Discussed about the hard questions and their solutions.

# • Azerbaijan Mathematical Selection Tests Participant

Azerbaijan TST for famous mathematical olympiads such as IMO, BMO, and JBMO

- Developed complex analytical and mathematical skills
- Used mathematical proof techniques such as proof by contradiction, induction and construction
- Learned and understood tricky Combinatorics and Number Theory theorems

## • "World Star" Gold Award Winner

Finals 2021-2022



Thailand International Mathematical Olympiad

 $\circ$  Developed various analytical geometry and combinatorics methods

• Gold Award Winner 2021-2022

Singapore and Asian Schools Math Olympiad

Developed fast and accurate thinking skills