# Yusif Mehdiyev Musa

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Azerbaijan, Baku

## **OBJECTIVE**

I am seeking new internship opportunities and practical knowledge in 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

• Rector's List of Honor for high SAT score

Full secondary School Numbered 12

2013 - 2024

Secondary Education

Baku, Azerbaijan

o GPA: 3.95/4.00

o SAT: 1500/1600

• 11th grade Natioanl 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

- Developed OpenGL pipeline system to render the mathematical graphs
- Implemented various algorithms and data structures for various purposes
- Implemented Object Oriented Programming structure to organize the project
- Will 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 modelds, Simulations and Math behind Machien learning.
- Includes coding examples in Python libraries such as pytorch, 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 (neovim)
- Database Systems: PostgreSQL(learning)
- Data Science & Machine Learning: Currently learning R tidyverse packages and important python libraries such as pytorch, matplotlib, pandas, scipy and beautifulsoup4
- DevOps & Version Control: Git, Cmake
- Other Tools & Technologies: LaTex, Linux (arch and debian based), Microsoft Office 365



## **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 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

*September* 2021 - *May* 2022

Thailand International Mathematical Olympiad

• Developed various analytical geometry and combinatorics methods



Singapore and Asian Schools Math Olympiad

Developed fast and accurate thinking skills





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