# Yusif Mehdiyev

+994555418363 | yusifmehdiyev55@gmail.com | ymehdiyev22216@ada.edu.az | josephmehdiyev.org

☐ Joseph Mehdiyev in Joseph Mehdiyev

Azerbaijan, Baku

#### **EDUCATION**

• ADA University 2024 - Present

Bachelor of Science in Mathematics

Baku, Azerbaijan

- Rector's List of Honor
- IELTS: 7.5 (8.5/8.5/6.5/6)

#### Complete Secondary School Number 12

2013 - 2024

Baku, Azerbaijan

General Secondary Education 
◦ CGPA: 4.97/5.00

SAT: 1500/1600 (790 M,710 W/R)
 11th grade National Exam: 282/300
 9th grade National Exam: 263/300

9th grade Honors Certificate

#### **PROJECTS**

# • Cormat: 3D math software for visualizing mathematical functions from scratch

March 2024 - Present

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

• 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 notes

March 2024 - Present

Personal notebook in a style of a book for personal purposes

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

# Real Analysis notes

September 2024 - Present

Personal notebook in a style of a book for personal purposes

- Includes notes about core topics of real analysis: completeness of reals, sequences, limits, derivatives, integrals.
- Wrote proofs to selected exercises, and practiced proof writing style and techniques.

#### **SKILLS**

- Mathematical Knowledge: Pre-Calculus, Calculus, Linear Algebra, Elementary Graph Theory, Elementary Number Theory, Probability and Statistics, Real Analysis
- **Programming Languages:** C, C++, Python, R, Lua, Python
- Database Systems: PostgreSQL
- DevOps & Version Control: Git, Cmake, Docker
- Language Knowledge: Azerbaijani (Native), Turkish (C1), English (C1; IELTS 7.5), French (B1)
- Other Tools & Technologies: Latex, Linux (arch and debian based), Microsoft Excel, RStudio, Vim/Neovim



**(**)

## CONTESTS, AWARDS AND OTHER ACTIVITIES

# • CodeForces Competitive Programming Contests

Practicing Competitive Programming skills periodically

May 2024 - Present



 Currently learning new algorithm concepts and and data structures and implementing them in a quick manner competitively.

## · Azerbaijan Olympiads blogger

Art of Problem Solving Forum

April 2022 - September 2022



 Archived Azerbaijan olympiad TSTST, TST and other problems for various national and international olympiads such as Azerbaijan Senior National Olympiad, Juniors'and Seniors' Balkan Mathmetical Olympiad and International Mathematics Olympiad.

# Azerbaijan Juniors' Mathematics Camp Participant

September 2021 - June 2022

Azerbaijan olympiad camp for training invidiauls for famous mathematical olympiads such as IMO, BMO, and JBMO

- Collaborated with peers to solve challenging mathematical problems
- Participated in intensive training sessions, improving problem-solving strategies and critical thinking abilities

#### Azerbaijan Mathematical Selection Tests Participant

*September* 2020 - *June* 2022

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

#### REFERENCES

#### 1. Kamala Omarova

Graduate student at UoW, Academic Advisor at ADA university

University Of Washington Email: kamalo@uw.edu Phone: +994 50 550 12 56

Relationship: Advisor, English teacher

#### 2. Javanshir Azizov

Asistant Professor ADA university

Email: jazizov@ada.edu.az

Phone:

Relationship: Math teacher