Yusif Mehdiyev

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 JosephMehdiyev Joseph Mehdiyev

Azerbaijan, Baku

EDUCATION

- **ADA University** *2024 - Present*

  Bachelor of Science in Mathematics Baku, Azerbaijan
  - GPA: 4.0/4.0
  - Rector's List of Honor
  - IELTS: 7.5 (8.5/8.5/6.5/6)

- **Complete Secondary School Number 12** *2013 - 2024*

  General Secondary Education Baku, Azerbaijan
  - 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
  - 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:** Vector Calculus, Linear Algebra, Elementary Graph Theory, Elementary Number Theory, Probability and Statistics, Real Analysis, Abstract Algebra
- **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** *May 2024 - Present*

  Practicing Competitive Programming skills periodically 🌐

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

- **Azerbaijan Olympiads blogger** *April 2022 - September 2022*

  Art of Problem Solving Forum 🌐

  ◦ 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 Mathematics Team Selection Tests Participant** *September 2021 - June 2022*

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

  ◦ Participated in TST of Azerbaijani team

References

1. **Kamala Omarova**
   Graduate student at UoW, Academic Advisor at ADA university
   University Of Washington
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2. **Javanshir Azizov**
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