Yusif Mehdiyev

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☐ Joseph Mehdiyev in 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

o 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 Honor's Certificate

EXPERIENCE

• Teaching assistant in ADA university

February 2025 - Since

Teaching Assistant in Linear Algebra

Baku, Azerbaijan

• Reviewed and graded homeworks and exams, assisted the professors in teaching.

PROJECTS

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

March 2024 - Present

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

• Developed a 3D math visualization tool from scratch using C++ and OpenGL, enabling users to plot and interact with mathematical functions.

- Implemented Linear Algebra transformations (e.g., translation, rotation, scaling) to manipulate 3D objects and camera perspectives programmatically.
- Designed and structured the project using Object-Oriented Programming (OOP) principles for modularity, scalability, and maintainability.
- Built and managed the project with CMake for organization.

PUBLICATIONS

Probability and Statistics notes

March 2024 - Present

Personal notebook in a style of a book for personal purposes



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- Compiled a comprehensive personal notebook covering Probability Theory, Statistical Inference, and Statistical Models.
- Explored key concepts such as probability distributions, hypothesis testing, regression analysis, and Bayesian inference, alongside their mathematical foundations.

Real Analysis notes

September 2024 - Present

Personal notebook in a style of a book for personal purposes

- Created a detailed personal notebook on Real Analysis, covering core topics of the field.
- Practiced proof-writing techniques to strengthen understanding of abstract concepts and improve problem-solving skills in advanced mathematics.
- Organized content in a book-like format for personal reference, emphasizing clarity, depth, and accessibility for future review and application.

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
- 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

- Actively learning and implementing algorithm concepts and data structures (e.g., dynamic programming, graph algorithms, trees, heaps) to solve problems efficiently and competitively.
- Practicing competitive programming techniques to improve problem-solving speed, optimize code performance, and write clean, efficient solutions.

· 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 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 Relationship: Mathematics professor