MUNEEB ZAHOOR

Undergraduate Physics major

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📍 Pampore

SUMMARY

I'm a 3rd year undergraduate student pursuing a degree in Physics at Aligarh Muslim University in Aligarh, India. My academic journey is fueled by an insatiable curiosity for the mysteries of the universe and a deep interest in quantum computing and artificial intelligence. I'm captivated by the potential of quantum computing and AI to revolutionize the way we solve complex problems and understand the world. I believe that the future holds boundless opportunities in these fields, and I'm committed to being at the forefront of this transformative wave. Beyond my academic pursuits, I aspire to be a philanthropist and a promoter of education. My mission is to contribute to a better world through education and knowledge dissemination.

EXPERIENCE

Summer Research Intern
Indian Institute of Technology, Madras

📅 05/2024 - Present   📍 Chennai, Tamil Nadu, India
Educational Sector

- Worked on a Project Titled " Gravitational and Electromagnetic Radiation" under Professor L. Sriramkumar under a Summer Fellowship Program.

Summer School Program
International center for Theoretical Sciences   📅 07/2024   📍 India
Educational Sector

- I was selected to Participate online in Summer School ICTS Program titled " Quantum Information, Quantum Field Theory and Gravity 2024"

Data Science Intern
Chinar Quantum AI

📅 12/2023 - Present   📍 Paderborn, North Rhine-Westphalia, Germany
Technological Sector

- Developed a PCA - Machine learning based Pedagogical Application.

Member
American Physical Society   📅 08/2023 - Present   📍 null
Education and Outreach

- Member till 2027

Member
Climate Change AI

📅 08/2024 - Present   📍 Pittsburgh, Pennsylvania, United States
Technological Sector

- I was passionate about how Climate issues are being solved using AI and ML.

Scientific Writer
Medium   📅 10/2023 - Present   📍 Aligarh, India
Educational Platform

- Participated in Quantum 30 Beginner's Challenge and wrote all the articles corresponding to each day on Medium.

Member
University Debating & Literary Club, AMU

📅 12/2022 - Present   📍 Aligarh, Uttar Pradesh, India
Cultural Education Centre

- Took part in some literary and professional discussions.

LANGUAGES

Language	Level	
English	Proficient	●●●●○
Kashmiri	Native	●●●●●
Urdu	Native	●●●●●
Hindi	Proficient	●●●●○
Arabic	Beginner	●○○○○

CERTIFICATION

The Complete Quantum Computing Course | Atil Samancioglu | Codestars
Udemy

Quantum 30 Challenge | Beginner | Quantum Computing India | 1 Oct. 2023 - 30 Oct. 2023
Quantum Computing India

Data Science Summer School 2023 | DS3 | Prof. Simon Munzert | August 14 - August 25
Hertie School Data Science Lab

Matlab Onramp | Mathworks
MathWorks

A journey into the world of Quantum Mechanics | One week online national Workshop "Alice in Quantumland" | 9-14 April 2024 | IAPT RC 13 & RC 02 |
Indian Association Of Physics Teachers

Introduction to Quantum Computing
The Coding School - 1 year training Program

TRAINING / COURSES

A Vision of Linear Algebra | Prof. Gilbert Strang | Res. 18 - 010 | Spring 2020 | Undergraduate | MIT OCW

Electricity and Magnetism | Prof. Walter Lewin | 8.02 | Spring 2002 | Undergraduate | MIT OCW

The Early Universe | Prof. Alan Guth |8.286 | Fall 2013 | Undergraduate | MIT OCW

AWARDS

- 💎 University Financial Merit Scholarship Award, AMU
- 💎 Pre Regional Mathematical Olympiad (PRMO).

EXPERIENCE

Secretary
Olympia Academia 🗓 01/2024 - 05/2024 📍 India
Educational Sector
- Exploited my leadership quality.

Member
Olympia Academia 🗓 03/2023 - 01/2024 📍 India
Educational Sector
- Active participation and leadership roles.

EDUCATION

B.S Physics (Research & Hons.) , Theoretical and Mathematical Physics
Aligarh Muslim University 🗓 10/2022 - 08/2026

Sunmer Research Intern, Theoretical and Mathematical Physics
Indian Institute of Technology, Madras 🗓 05/2024 - 07/2024

Quantum Computation
The Coding School 🗓 08/2023 - 04/2024

Intermediate education , Mathematical Sciences
Government Boys Higher Secondary School, Pampore, Kashmir, India, 192121
🗓 04/2019 - 03/2021

High School
Delhi Modern Public School, Pampore, Kashmir, 192121 🗓 11/2018

PROJECTS

Electromagnetic and Gravitational Radiation
🗓 06/2024 📍 Chennai, India

I was selected in Summer Fellowship Program at IIT Madras, where I worked under Professor L. SriramKumar under a project titled " Gravitational and Electromagnetic Radiation" and it came out as a report.
- Future Planning: Still the work is still going on it and soon it will come out to be a research paper.

PCA ImageXpert
🗓 2024 📍 India

I lead a team called "Quantum Inno Visionaries" at CQAI and developed a python based streamlit application which is a 1st in the series of many applications for introducing the Machine learning in an interactive way, also it is a useful tool to do Image Compression and Background Removal of an image.
- Future Planning: Upgradations like more interactive interface, and Optimization.

Encryption using Quantum Key Distribution.
🗓 03/2024 - 03/2024 📍 India

Utilized BB84 protocol in cirq and generated a key using Quantum Key Distribution, and encrypted my message through encryption function which takes message and generated key as an argument and used concepts of ASCII values to encrypt my message, similarly developed decryption function.
- Future Planning: Develop a prototype with a beautiful interface.

KEY ACHIEVEMENTS

Topper
I have topped Department of Physics and Faculty of Science at my University till now with CGPA of 9.3

Also I topped the departmental Physics test and was awarded with Undergraduate Financial Merit Award.

Governor's Award
I was selected for Governor's Award in "Bharat Scouts and Guides".

PRMO
I qualified the Pre- Regional Mathematical Olympiad conducted by TIFR, Mumbai, India, when I was in my Intermediates.

CUET - Physics
I qualified the Central University Entrance Test, and secured 96.7 percentile in Physics.

PASSIONS

Quantum AI Scientist

Interdisciplinary Researcher

Entrepreneur

Philanthropist

PROJECTS

Mini Project - Compare Stellar Spectra | MATLAB | MathWorks

📅 07/2023 - 07/2023   📍 Kashmir, India

In the previous project, I calculated the speed (in km/s) of a star relative to Earth by using its spectrum. In this project, I calculated all the stars' speeds at once. Then I created a particular line plot of the star spectra and did some comparison and analysis.

· Future Planning: Learn Simulink.

Mini Project - Stellar Motion | MATLAB | MathWorks

📅 07/2023 - 07/2023   📍 Kashmir, India

The star spectrum data in the spectra matrix was collected at evenly spaced wavelengths (λ), and I was given the starting wavelength (λstart), the spacing (λdelta), and the number of observations.

MY TASK:

Create a variable named lambdaEnd (λend) that contains the value of the last wavelength in the recorded spectrum. I have to calculate lambdaEnd with the expression λstart+(nObs−1)λdelta. Then Use lambdaEnd to create a vector named lambda (λ) that contains the wavelengths in the spectrum, from λstart to λend, in steps of λdelta.

· Future Planning: Learn Simulink and simulate the satellite Systems.

SKILLS

| Leadership | Python | MATLAB | Machine Learning |

| Quantum Computing | Mathematical Modelling | Communication |

| Presentation | Latex | SPSS | Minitab | Data Analytics |

| Overleaf | Github | Streamlit | Algorithmic Thinking | PCA |

| Data Visualization | Qiskit | Cirq | Numpy | Seaborn |

| Scouts | Matplotlib | Pandas | Poetry | Science Journalism |

Your Skill