Mukeem Khan

Agentic & Robotic AI Trainer | Mathematics with Computer Science

New Delhi, India

PROFESSIONAL SUMMARY

M.Sc. Mathematics with Computer Science student at Jamia Millia Islamia, with a completed B.Sc. in Mathematics, Physics and Chemistry. Seeking **Agentic AI Trainer** and **Robotic AI Trainer** roles that draw on mathematical reasoning, C and Java programming, computer science and an understanding of physical systems. Academic preparation supports step-by-step problem analysis, code interpretation and scientific reasoning. English proficiency and native Hindi and Urdu provide a language foundation for multilingual AI training tasks. Interactive demonstrations of this work are on my portfolio website.

CORE STRENGTHS AND COURSEWORK

Strongest areas, in order: **1. Mathematics 2. Coding**.

- **Mathematics:** Calculus, linear algebra, abstract algebra, discrete mathematics, real and functional analysis, topology, differential equations and geometry. Numerical methods include root-finding, interpolation, approximation, integration, error estimation and stability analysis. Further study covers complex analysis, differentiable manifolds and wavelets. Relevant foundation for examining multistep solutions, numerical accuracy and mathematical explanations.
- **Coding:** C: control flow, arrays, strings, pointers, functions, recursion, structures and file handling. Java: classes, objects, encapsulation, inheritance, polymorphism, interfaces and exception handling. HTML, CSS and JavaScript coursework covers forms and event handling. Relevant foundation for tracing program execution, interpreting code and examining input-output behaviour.
- **Computer Science:** Data structures and algorithms: linked lists, stacks, queues, trees, graphs, searching, sorting and time/space complexity. Operating systems: scheduling, synchronization, deadlocks, memory and file systems. DBMS study covers relational models, keys, normalization, transactions and SQL. Relevant to reasoning about task sequences, program state and structured data.
- **Physics:** Mechanics, motion, forces, oscillations, electromagnetism, optics, thermodynamics, electronics and modern physics, with laboratory coursework. M.Sc. mechanics includes Lagrangian and Hamiltonian formulations. Relevant foundation for interpreting physical actions, motion, measurements and cause-and-effect relationships in robotic AI tasks.
- **Chemistry:** Inorganic, organic and physical chemistry: atomic structure, bonding, reaction mechanisms, thermodynamics, equilibrium, kinetics and spectroscopy, with practical chemical analysis. Relevant foundation for interpreting scientific procedures, material properties, observations and technical explanations.
- **English:** Reading comprehension, inference, vocabulary, grammar, literature and structured writing. Relevant to understanding task instructions and assessing clarity, meaning and consistency in written responses.
- **Hindi:** Reading comprehension, grammar, prose and poetry interpretation, and structured written expression. Native language background relevant to interpreting instructions and reviewing the meaning of Hindi responses.

PROJECTS

Personal Portfolio Website

HTML, CSS, JavaScript | Cloudflare Pages, GitHub | 2026 |

- Built and published a personal portfolio of my coursework, projects, certificates and profiles, available in English, Hindi and Urdu (right-to-left layout for Urdu).
- Interactive lab: a response-comparison exercise with a scoring rubric that mirrors rating model outputs; Newton's method and trapezoidal-rule visualisations; and a robot task-planning exercise with physics-based failure analysis.
- Reasoning checks in mathematics and C/Java that change on every visit and give hints instead of answers.
- Responsive from 320 px wide and keyboard accessible; Lighthouse scores of 100 for accessibility, best practices and SEO.

Multimodal Emotion Recognition and Reasoning: A Comprehensive Study

M.Sc. Minor Project | Jamia Millia Islamia | 2026 |

- Conducted a theoretical literature review of 24 research papers on emotion recognition and reasoning across audio, video and text; compared feature extraction, fusion strategies, benchmark datasets and model architectures.
- Examined explainability, missing or noisy modalities, temporal information leakage and cultural bias, developing research-based understanding relevant to multimodal AI evaluation and human-machine interaction.

EDUCATION

M.Sc. Mathematics with Computer Science

Jamia Millia Islamia, New Delhi

- **Academic Focus:** Mathematical reasoning and numerical analysis alongside programming, algorithms and operating systems; advanced mathematics and DBMS study. Programming, data-structure, operating-system and database laboratory components connect theory with computing practice relevant to AI training tasks.

Bachelor of Science

Maharaja Surajmal Brij Vishvavidyalaya, Bharatpur, Rajasthan

- **Subjects:** Mathematics, Physics and Chemistry. Mathematical problem solving, physical principles, chemical processes and laboratory coursework provide a multidisciplinary foundation for scientific reasoning and interpreting experimental observations.

Senior Secondary | Science

Sanatan Dharm Shiksha Sadan Senior Secondary School, Dholpur
Board of Secondary Education, Rajasthan

- **Subjects:** Mathematics, Physics, Chemistry, English and Hindi; foundation in quantitative reasoning, science and written comprehension.

Secondary

Ikra Secondary School, Dholpur | Board of Secondary Education, Rajasthan

- **Foundation:** Mathematics, Science, Social Studies, English, Hindi and Urdu; Foundation of Information Technology.

ONLINE COURSES AND CERTIFICATES

Python | Kaggle Learn

Kaggle |
Course content: functions, conditionals, loops, lists, strings, dictionaries and external libraries.

Intro to Machine Learning | Kaggle Learn

Kaggle |
Course content: how models work, data exploration, building a first model, model validation, underfitting and overfitting, and random forests.

SQL (Intermediate) | HackerRank Skills Certificate

HackerRank |
Verified skills certificate in SQL; the HackerRank profile also shows Python and SQL badges.

LANGUAGES

English - Professional proficiency | Hindi - Native | Urdu - Native