

# Aitzaz Munir Shaikh

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## EDUCATION

### Cornell University, College of Arts and Sciences

Ithaca, New York

B.A. in Computer Science and Mathematical Physics (dual major)

Expected Graduation, May 2027

- o **Concentrations:** Machine Learning, Artificial Intelligence, Modelling
- o **Related Coursework:** Functional Programming, Data Structures & Algorithms, Object-Oriented Programming, Discrete Structures, Math Modelling, Multivariable Calculus, Linear Algebra, Electromagnetism, Mechanics

## EXPERIENCE

### Mage Data

New York, New York

Software Developer Intern

May 2024 - Present

- Calculated re-identification risks through k-anonymity, l-diversity, t-closeness using multiple python libraries
- Created a python script that displays users risk metrics and provides suggestions for safer data-masking functions
- Implemented machine learning algorithms to find optimal k-anonymity value to minimize information-loss and maximize security gain during masking

### Systems Limited

Karachi, Pakistan

Software Engineering Intern

Dec 2023 - Jan 2024

- Assisted change of ERP system of K-Electric from SAP ECC to SAP s/4 Hana
- Built a screensaver using Powerpoint for employee's computers which displays the project's timeline and progress
- Filtered and sorted data using tools in excel such as Gantt charts

### Punjab Police Research Department

Lahore, Pakistan

Data Analytics Intern

May 2022 - August 2022

- Analyzed 4906 records of child abuse cases to make predictions of vulnerable communities of child abuse
- Charted paradigms and used trend-lines to observe relationships between different variables
- Implemented statistical algorithms such as k-means clustering and used sampling to generalize results to the province

### International Mathematical Olympiad 2023

Lahore, Pakistan

Training camp participant

Nov 2022 - Jan 2023

- Among the 50 selected after placing top in Pakistan in the national stages in 2021 and 2022
- Enhanced problem-solving knowledge and skill in discrete areas of mathematics
- Worked in a team in order to find trivial solutions to problems requiring intuitive thought

## PROJECTS

### ChaiOrSleep

New York, New York

Personal

May 2024-June 2024

- Built an app using Swift that informs users of how much chai they should drink based on their sleep cycles
- Trained a machine learning model through Create ML using regression analysis and used Core ML to feed data into the app
- Connected Core ML model to SwiftUI application to make predictions from the trained ML model

### Game: Catapult Launch

New York, New York

Personal

Dec 2023 - Jan 2024

- Coded a game in python in which user launches projectile to hit target employing concepts of object-oriented programming
- Employed SUVAT equations in sync with computer frames to govern motion of projectile after launch

## HONORS AND AWARDS

Top 50 in National Math Talent Contest 2021 & 2022 • Silver Medalist in South-East Asian Mathematical Olympiad (SEAMO) 2021 • Merit in SEAMO 2022 Champions Division • Distinction in UWaterloo Euclid Contest 2022 • 1st globally in International Academic Marathon's Math module • Bronze Honor in International Youth Math Contest 2020

## SKILLS

**Programming:** Java, Python, JavaScript, HTML, CSS, SQL, Swift (iOS)

**Tools:** IntelliJ, Pulsar, Git, Excel, Powerpoint, Office