


# Irsath Azeez

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 [Website Portfolio](#) | [GitHub](#) | [LinkedIn](#)

 646-755-2024

## SKILLS

**PROGRAMMING:** C++ | Java | Python | JavaScript | PHP

**DATA ANALYSIS & MACHINE LEARNING:** Python | MySQL | PostgreSQL | SQLite | Big Query (Cloud-large data), Microsoft Excel

**DATA VISUALIZATION:** Matplotlib | Tableau | R | Looker Studio

**SYSTEM ADMINISTRATION:** Bash/Bat script

**CYBER SECURITY:** Bash/Shell (Operating System) | Wireshark (Network)

**SOFT SKILLS:** Detailed-oriented | Problem-solving | Technical mentorship | Data-driven Decision making

## PROJECTS

**Amazon Sales Analysis:** Led a data analysis workshop on Amazon Sales Reports using large datasets, taught students data analysis techniques, including feature engineering, preprocessing, data selection, and visualization using Python. Processed and stored data in MySQL.

**Earthquake Analysis of Turkey:** Built a data visualization dashboard to analyze seismic activity trends for disaster preparedness. This project involved filtering large datasets, feature selection, data engineering, and time-series analysis using Python.

**Fraud Detection Model:** Trained a K-Nearest Neighbors (KNN) model to classify fraudulent transaction, achieving 99% accuracy. Utilized a large dataset and applied necessary preprocessing steps before feeding the data into the model for training. Used Python to complete this project.

**Virtual Surveillance Monitor:** Developed an active virtual surveillance system to monitor real-time activity on a computer's operating system. This project enhanced efficiency in detecting and alerting malicious activity by inspecting multiple locations on the computer simultaneously. Implemented a Bash script language to achieve this.

**Metagenomic Sequence Data Analysis:** Created an efficient system design to analyze Metagenomic ASV sequence at Columbia University. Used Python with AnnData structure to design a system that efficiently aggregates and analyzes metadata.

## EXPERIENCE

### **College Assistant**

CUNY Lehman College, The Bronx, New York | Aug 2022 – Present

- Tutored students in computer science with a focus on Java, Python, SQL, Operating System, fostering a deep understanding of core concepts and enhancing problem-solving skills
- Delivered hands-on troubleshooting and debugging support

### **College Assistant**

CUNY Accelerated Study in Associate Program (ASAP) at BMCC, NY | Feb 2022 – Present

- Tutored students in computer science, covering basic and advanced C++ concepts
- Conducted workshops for students on Data Science and computer related topics

### **Research Scholar in Dr. Itsik Pe'er's Lab**

Columbia University & Amazon (SURE Program), NY | June 2023 – Aug 2023

- Focused on single-cell microbiome analysis using data mining and machine learning
- Developed an efficient system design using Python to analyze metagenomic data

## EDUCATION

### **CUNY LEHMAN COLLEGE**

Bachelor of Science in Computer Science  
Jan 2021 - May 2024 | GPA 3.854

### **CUNY BOROUGH OF MANHATTAN COLLEGE**

Associate of Science in Computer Science  
Aug 2018 – Aug 2020 | GPA 3.9

## HONORS & AWARDS

**Magna Cum Laude** - CUNY Lehman College

**Dean's List** – CUNY Lehman College

**Presidential Scholar** – CUNY Lehman College

College

**National Society of Leadership and**

**Success (NSLS)** – CUNY BMCC College

**Cyber Security Honors** - CODE PATH Org

**Dean's List** – CUNY BMCC College

**HSI Battle of the Brains Competition**

- Represented CUNY Lehman College

**IATA Travel & Tourism** – Best Performer in the country of Sri Lanka

## COURSEWORK

Data Structure & Algorithm

Operating System Analysis

Database Systems

Cyber Security

Machine Learning

Applied Statistics

Cloud Computing (Google)

## LANGUAGES

Tamil

Sinhala

## INTERESTS

Fitness

Cricket

Soccer

Traveling