

Abeer Mathur

Email: abeermathur7@gmail.com * Phone: 267-300-5345 * Website: <https://abeermathur7.github.io/portfolio/>

EDUCATION

The Pennsylvania State University, College of Engineering
Bachelor of Science in Computational Data Science GPA: 3.5/4.0
Minor: Mathematics, Statistics

University Park, PA
May 2024

Relevant Coursework: Data Structures and Algorithms, Programming in Python, Data Management for Data Science, Statistics, Probability, Artificial Intelligence, Web-based Object Oriented Programming, Machine Learning, Big Data (Scala, Hadoop).

SKILLS

Python (numpy, sklearn, pandas, matplotlib) * SQL * Java (JOptionPane) * Tableau * R (programming language) * Docker * Linux * Git
Hadoop * Scala (Spark) * Azure DevOps * PowerBI * Statistical Modeling * Machine Learning * Artificial Intelligence * Data Visualization
Data Analysis * KQL * Android Studio * Figma * Azure * ETL * Time management * Conflict Management * Negotiation * Leadership

EXPERIENCE

Data Science Intern (Database Redesign/API Performance Degradation Analysis)

Constellation Energy

Remote, PA
June 2023 – Present

- Redesigned and optimized an Oracle SQL database for a customer-centric application serving 200,000 users, resulting in a remarkable 44% reduction in database size.
- Analyzed inefficiencies in performance and runtime for API endpoints by writing KQL queries and building a PowerBI dashboard, leading to improvements in performance and runtime.

Data Scientist (Autonomous Vehicle Project)

Penn State Advanced Vehicles Team

State College, PA
Jan 2023 – Present

- Collaborated with a small sub-team to help build a level 4 autonomous vehicle in a project partnered with General Motors.
- Collected (Cepton) LiDAR and (Delphi) Radar outputs by publishing the raw data to a ROS topic.
- Calibrated the LiDAR and Radar data by testing and analyzing the outputs in a Docker container.
- Streamlined the Radar data collection process through a Python script that provided usable 3D coordinate data.
- Utilized the data to train a “YOLO” machine learning model to detect pedestrians and objects from up to 175m.

Assistant Data Scientist (Addiction Dashboard project)

Department of Human Development and Family Studies

State College, PA
Oct 2021 – May 2022

- Utilized SQL and R programming skills to extract and clean geolocation data pertaining to recovering addicts.
- Examined the dataset and built functioning data visualizations like charts and digital line graphs using Tableau.
- Analyzed the dataset and synthesized key findings in a formal presentation to my team.

Lead Data Scientist (KCF Industry 4.0 project)

KCF Technologies (Automotive Company), Engineering Leadership Society Volunteer

State College, PA
March- April 2022

- Worked collaboratively to collect survey data from major automotive companies regarding Industry 4.0 Practices.
- As the lead data scientist, created visualizations on the survey data using Tableau and debriefed my team on my findings.
- Led the team and presented our findings to company executives in a 25-minute-long formal presentation.

Artificial Intelligence Tic Tac Toe Game

Personal Project

State College, PA
June 2021 – July 2021

- Utilized my knowledge of data structures, algorithms, and object-oriented programming concepts to apply the “minimax” algorithm and build a two-player Tic-Tac-Toe game in Java.
- Demonstrated excellent time management and critical thinking skills to break the project into manageable weekly goals.
- Integrated a GUI that supports a two-player system through the JOptionPane library.

CodePath Android Development

Personal Project

State College, PA
June 2021-July 2021

- Incorporated Agile programming methodologies to create clones of apps such as Instagram, Twitter, and Flickr (check website).

LEADERSHIP/ EXTRACURRICULARS

Statistics Club

Vice President

State College, PA
2023-2024

- Lead club activities organized club social events, spoke to sponsors and companies to organize talks, trips, and activities for club members.

50/50 Raffle

Volunteer Sales associate

State College, PA
November 2022

- Sold **\$3090** in raffle ticket sales in 3 hours through my excellent communication and negotiation skills.
- Ranked 1st** out of 25 sales representatives at the event while being the only individual seller in the group.

Abba Java Coffee

Barista

State College, PA
2020 – Present

- Serve coffee and help distribute food, clothing and other goods to students and those in need in the State College community.