

Abeer Mathur

267-300-5345 | abeermathur7@gmail.com | linkedin.com/in/abeer-mathur | abeermathur7.github.io/portfolio

EDUCATION

Pennsylvania State University

Bachelor of Science Computational Data Science, Minor in Mathematics and Statistics

State College, PA

Aug. 2020 – May 2024

EXPERIENCE

Data Science Intern

Jun 2023 – Aug 2023

Constellation Energy

Remote, PA

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

Data Scientist (Autonomous Vehicle Project)

Jun 2023 – Aug 2023

Penn State Advanced Vehicles Team

State College, PA

- Built a level 4 autonomous vehicle for a project partnered with IBM and General Motors.
- Collected and calibrated (Cepton) LiDAR and (Delphi) Radar outputs by publishing the raw data to a ROS topic.
- Streamlined the Radar data collection process by running a Python script in Docker to convert raw data into 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)

Oct 2021 – May 2022

Department of Human Development and Family Studies

State College, PA

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

Lead Data Scientist (KCF Industry 4.0 project)

March 2022- Apr 2022

KCF Technologies (Automotive Company), Engineering Leadership Society Volunteer

State College, PA

- Collaborated to collect survey data from major automotive companies regarding Industry 4.0 Practices.
- Developed visualizations on the survey data using Tableau and presented our findings to company executives.

PROJECTS

Artificial Intelligence Tic Tac Toe Game | *Java, JOptionpane*

Jun 2021 – Jul 2021

- Employed my knowledge of object-oriented programming, data structures, and algorithms concepts to apply the “minmax” algorithm and build a two-player AI(Artificial Intelligence) Tic-Tac-Toe game in Java.
- Integrated a GUI that supports a two-player system through the JOptionPane library.

Android App Development (CodePath) | *Java, Android Studio*

Jun 2021 - Jul 2021

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

LEADERSHIP

Abba Java Coffee | *Volunteer Barista*

Aug 2022 – Present

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

Statistics Club | *Vice President*

Jan 2023 - Present

- Managed 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*

Nov 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.

TECHNICAL SKILLS

Languages: Python, R, Java, SQL, JavaScript, HTML/CSS, Scala

Frameworks: Android Studio, Figma, Azure, Hadoop, Spark, Tableau, PowerBI, Azure DevOps

Developer Tools: Git, Docker, Linux, Azure, Android Studio, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse

Libraries: numpy, sklearn, pandas, matplotlib, XGBoost, dplyr, tidyverse, ggplot2

Techniques: Agile, ETL, Statistical Modeling, Machine Learning, Artificial Intelligence, Data Visualizations, Data Analysis, Data Cleaning, Object-Oriented Programming, CI/CD, DevOps