## **Aesha Shah**

github.com/aesha15 linkedin.com/aesha15 Tempe, Arizona

EDUCATION

**Master of Science in Computer Science** 

**Graduating Dec 2023** 

Arizona State University, Tempe, AZ

GPA 4.22/4

<u>Relevant Coursework:</u> Data Mining, Data Science for System Decision Analytics, Data Processing at Scale

**Bachelor of Engineering in Computer Science and Engineering** 

Aug 2017 - Jun 2021

University of Mumbai, Thakur College of Engineering and Technology (TCET), Mumbai, INDIA

CGPA 9.31/10

**SKILLS** 

Languages : Python, SQL, SAS, HTML/CSS, R

Frameworks : BigQuery, Django, Git, AWS, Google Cloud Platform, Google Marketing Platform, PostgreSQL, PowerBI, JIRA, Tableau

Libraries : Pandas, NumPy, Scikit-learn, NLTK, OpenCV, Matplotlib

Technical Skills : Machine Learning, Data Science & Analytics, Data Structures & Algorithms, Database Management Systems

PROFESSIONAL EXPERIENCE

# Graduate Services Assistant Data Science Research Aide - SCAI at Arizona State University Responsibilities include -

Aug 2022 - Current

- Analyzing Arizona's Medicaid data to enable data-driven informed decisions.
- Researching and curating a timeline that reflects the policy changes for Opioid Use Disorder in the past 5 years and the impact of COVID-19.
- Providing **project management** support and assistance to ensure project progress and effective communication with key stakeholders for the **State Opioid Response (SOR)** project.

## Machine Learning and Artificial Intelligence Specialist Assistant - EdPlus at Arizona State University

Mar 2022 - Aug 2022

- Developed Machine Learning predictive models to track and predict students' performances over the semester for various courses.
- Aggregated student data to perform quantitative analysis from various data sources and transformed them into actionable insights.
- Produced data to promote student success by providing target audience lists of students to receive interventions based on the predictions.
- Reduced fetch and load time by 65% by successfully reproducing SQL queries for Google Data Studio dashboards in BigQuery.
- Leveraged Google Analytics and BigQuery to track and analyze web behavior and activity aimed at increasing prospective student enrollments for the ASUOnline website.

#### Machine Learning Intern - iPing Data Labs, INDIA

Aug 2021 - Nov 2021

- Developed a deep learning powered Automated Invoice Data Extractor for an Australian client using Python to detect and extract valuable information from digital energy invoices using Computer Vision and NLP, eliminating manual labor by 80%.
- Developed and trained various machine learning models to identify the semantic structure of the energy bill documents.
- Trained an Object Detection model to localize 10+ relevant data points in 25+ invoice formats and achieved 95%+ F1-Score.
- Interpreted 1,25,000+ images from CCTV feeds to detect 7 object categories during day and night for Traffic Detection and Tracking.
- Devised a parsing algorithm to extract and structure data from invoice PDFs using Tabula, OCR, and Regex to engineer model data for training.

#### Team Lead and Python Developer Intern - TinkTank, INDIA

May 2020 - Dec 2020

- Led a **team of 4** interns and contributed heavily to brainstorming and executing an end-to-end workflow to build an analytics tool that enables recruiters and hiring managers to **analyze**, **track and visualize** team performance metrics/KPIs.
- Implemented a Business Rule Engine in Python that performed Custom Data Validation on 40+ attributes to obtain clean data for visualization using custom dashboards for each user type.
- Designed and developed the ETL pipeline to map data from complex datasets and multiple data sources using PostgreSQL and Django.

#### PROJECTS AND RESEARCH

## Analysis of Machine Learning Models for Road Traffic Accidents, Academic Project

Feb 2022 – May 2022

- Led and implemented an end-to-end Machine Learning project pipeline to classify Accident Severity from a highly imbalanced dataset.
- Scrutinized four predictive models and boosted the model accuracy up to 84% by incorporating hyper-parameter tuning.
- Evaluated the models using Cross-Validation, and performed Feature Importance to make informed conclusions.

## ${\bf Plant\ Disease\ Identification\ and\ Prediction,}\ {\it Undergraduate\ Major\ Project}$

Jun 2020 – Apr 2021

- Trained a CNN model with 89% accuracy on images captured on-ground to classify Diseased and Healthy Crop Leaves.
- Established a User Interface to visualize the model performance and deployed it on Heroku.

## ShapeNSoul (Mobile Application), Personal Project

Dec 2020 – Jan 2021

• Developed a Mobile Application using Flutter and Firestore for a Naturopathy Clinic to facilitate appointment scheduling, notification alerts, and personalized profile and diet charts for each patient.

#### CO-CURRICULARS

• In-Person Attendee - Grace Hopper Celebration, Orlando, Florida

Sep 2022 Jan 2019 - Dec 2020

Student Representative and Member, Board of Studies - TCET

Aug 2018 - May 2019

• Publication Head, Computer Society of India (CSI-TCET)

Aug 2018 - May 2019

Social Volunteer, Extension Work Team (EWT-TCET)

Aug 2019 - Sep 2019

Chief Organizer, Zephyr - Annual TechfestEditor, The Byte (College Magazine)

Aug 2017 - May 2018

• Delegate, TCET Model United Nations Conference

Sep 2017

legate, TCLT model officed Nations Conference

### **CERTIFICATIONS**

Google Data Analytics Professional Certificate, Google, Coursera | Advanced Google Analytics, Google Analytics | Deep Learning Specialization, deeplearning.ai, Coursera | Python 3 Specialization, University of Michigan, Coursera | Introduction to Machine Learning, IIT Madras, NPTEL