# **Tejas Sanjay Kakad**

Email: kakadtejas1027@gmail.com Phone Number: +1 (409) 877-6760 Tejas' Portfolio Website

#### **Professional Profile:**

Driven data science and analytics professional with a solid foundation in data analysis, machine learning, and software engineering. Proficient in Python, statistical modeling, and big data processing, with hands-on experience in developing data workflows, automating analyses, and extracting actionable insights from complex datasets. Skilled in applying data-driven approaches to solve business challenges, optimize processes, and support informed decision-making.

#### **Education:**

### Texas A&M University - College Station, TX

August 2018 – December 2022

Major: Bachelor of Science, Computer Science | Minor: Cybersecurity, Mathematics

#### **Courses and Certifications:**

- Coursera IBM AI Engineering Professional Certificate
- Coursera Machine Learning Specialization
- Coursera IBM Data Science Professional Certificate
- Google Data Analytics Professional Certificate
- GCP: Machine Learning Engineer Certificate
- Coursera Generative AI Engineering (LLM)

## **Professional Experience:**

# Upwork – March 2025 – Present

#### Machine Learning Engineer -

- Designed and deployed an Al-driven football scouting web platform with FastAPI, PostgreSQL, and SQLAlchemy.
- Engineered REST APIs for biometric trends, player insights, contract projections, and chat-based analytics.
- Developed NLP-driven chat routing with custom prompt classification and trending player insights.
- Authored data seeding, transformation, and ingestion pipelines for StatsBomb JSON datasets.
- Integrated Great Expectations for database validation and automated test reports.
- Built match and player comparison logic using live and historical statistics.

#### Urban Resilience.AI Lab - College Station, TX

January 2024 – May 2024

#### Data Science Researcher -

- Collaborated with a doctoral candidate to spearhead an in-depth analysis of traffic disruptions caused by Hurricane Harvey, leveraging Python in a *Jupyter Notebook* setting to manage and analyze sophisticated traffic datasets.
- Utilized Pandas for robust data structuring and manipulation, and NumPy for complex numerical computations to analyze pre- and post-disaster traffic flows across Houston.
- Integrated *NetworkX* to model and analyze the network of city junctions, enabling a detailed examination of traffic patterns and connectivity disruptions.
- Applied GeoPandas for advanced geospatial analysis, correlating junction-to-junction travel times with property damage assessments within a one-mile radius, providing a spatial dimension to the traffic data.
- Developed predictive models that combined temporal and spatial data analyses to yield comprehensive insights into the infrastructural impact of natural disasters, contributing significantly to urban planning and disaster resilience strategies.

# Urban Resilience.Al Lab – College Station, TX

August 2022 – December 2022

## Data Science Researcher -

- Developed advanced data collection frameworks in Python to systematically capture and analyze user-level recovery patterns in disaster recovery studies, increasing the resolution and accuracy of behavioral data analysis.
- Applied machine learning techniques and statistical models (including regression analysis and cluster analysis) to dissect large datasets, identifying patterns and trends to inform equitable recovery strategies.
- Utilized Python libraries such as Scikit-Learn, Pandas, and NumPy to perform exploratory data analysis and visualize disparate data sources, deriving actionable insights for urban resilience enhancement.
- Co-authored a journal publication focusing on the statistical analysis of homogeneity and entropy in post-disaster recovery, contributing to academic discourse on urban resilience.

#### Skills:

SQL
Tableau
PySpark
Apache Spark
Linux/Unix
C/C++
JavaScript
Hadoop
Pandas
Git/GitHub
Python
PyTorch
Scikit-Learn
Matplotlib
TensorFlow