## **Muhammad Ahmed Arshed**

+92 3064019956 · WapdaTownLahore
ahmed.arshed.562@gmail.com | website | linkedin

### Professional Summary ......

**Python Developer** September, 2021 - present

#### Summary

Experienced Python Developer with a strong background in backend development, automation, and natural language processing. Specialized in building robust and scalable APIs using Django and Flask. Skilled in designing and managing complex data models with PostgreSQL, MsSQL, MongoDB, and Elasticsearch. Proficient in automating workflows and data pipelines using Python and Scrapy. Experienced with version control using Git and Agile tools like Jira. Familiar with modern frontend frameworks such as React for internal tools and dashboards.

### > Experience .....

Arbisoft

August, 2023 - present

#### Sr. Software Engineer

- Project: Meeting Transcription Summary App
  - Built automated speech-to-text pipeline: Integrated speech recognition models to convert meeting audio into structured text transcripts in real time.
  - Processed participant-specific insights: Parsed and tagged transcript data to identify speaker contributions and organize content per individual.
  - Generated smart meeting summaries with LLMs: Leveraged OpenAl's ChatGPT model to produce concise, actionable meeting summaries tailored to each participant's input.
- Project: ERP System Work Stream
  - Integrated Django for robust API development: Developed modular Django APIs for core ERP modules, ensuring seamless backend integration.
  - Utilized PostgreSQL for complex data models: Designed normalized schemas and managed relational data using Django ORM and advanced PostgreSQL features.
  - Enhanced API reliability and maintainability: Followed best practices for error handling, modularization, and code reusability to ensure clean and maintainable APIs.
- Project: Deets Travel Guide Platform
  - Built scalable APIs using FastAPI: Developed high-performance REST APIs powering a personalized travel recommendation engine.
  - Integrated HubSpot and Booking.com APIs: Enabled CRM synchronization and real-time hotel/experience data through external API integration.
  - Designed PostgreSQL-backed data models: Created relational schemas for destinations, travel experts, and recommendations to support dynamic content.
  - Enabled expert-based travel planning: Implemented functionality to follow travel experts and receive
    curated itineraries and place suggestions.
- Project: RekiTV
  - Developed and supported crawler operations: Designed and maintained scalable web crawlers to extract critical competitive intelligence from platforms such as IMDb and JustWatch.
  - Automated crawlers and made them accessible through APIs: Built RESTful APIs using Flask to expose crawler output.

### **Pursue Today**

September, 2021 - August, 2023

### **Python Developer**

- **Developed and supported crawler operations:** Developed and supported operations of a crawler to gather important competitive data from over 25 competitor websites. This data was essential for making informed business decisions.
- Automated crawlers and made them accessible through APIs: Automated the crawlers and made them accessible
  through API endpoints. This allowed for easy access to competitor product URLs and scraped data, making it simpler
  to gather and analyze relevant information.
- Implemented algorithm for automated pricing prediction: Implemented a company algorithm to automate the prediction of new prices for over 10 million SKUs. This helped to reduce manual effort and increase accuracy in pricing decisions.
- Leveraged Flask for API accessibility: Utilized the power of Flask to make the algorithm easily accessible through API endpoints. This made it possible for users to quickly and easily retrieve pricing predictions.
- Worked with multiple databases to store and process data: Worked with various databases, including MongoDB, MsSQL, and Elastic search, to store, process, and consume relevant data for the algorithm. This allowed for efficient management of large amounts of data, making it possible to make informed pricing decisions based on accurate data analysis.

## ▷ Skills .....

- $\Rightarrow$  Programming Languages
- ⇒ Web Frameworks
- Skilled and experienced in Python, Full Stack Javascript, ES6, Java, C/C++, PHP. Experienced in Flask, Django, Typescript, Node.js, JavaScript, React

⇒ Databases

⇒ Libraries and tools

⇒ Other skills

Skilled in designing and implementing databases in MsSQL, MongoDB, and SQL Server

NumPy, Pandas, Scikit-learn, NLTK, BeautifulSoup, Selenium, Git

Web scraping, Data analysis, Natural language processing, Automation, Project management.

## > Projects ......

# Robbery Detection Using Video Feed

Nov, 2020 – May, 2021 Final Year Project

#### Detect robbery on real time using video feed.

- Detect robbery in real-time using video feed.
- Detect weapons and malicious activities using YOLOv4.
- Trained YOLO model on weapons data sets including guns and knives to detect weapons in live videos frame-by-frame
  to sense the possibility of a robbery.

## Sentiment Analysis On Amazon Data-set

Dec, 2019

## Did Sentiment analysis on amazon data-set using nltk, pandas and numpy

- Conducted sentiment analysis on Amazon dataset using NLTK, Pandas, and NumPy.
- Predicted if the customer reviews were fake or real.

# Railway Management System *March, 2018*

### Developed website

- Developed a website using HTML, CSS, PHP, JavaScript, and jQuery with MySQL database.
- Created a railway management system that enables customers to book tickets and view train schedules.

# Amazon Keyword Tracker January, 2021

#### Tracks products listed for a specific keyword on Amazon

- Conducted sentiment analysis on an Amazon dataset to classify customer reviews as real or fake based on their sentiment.
- Utilized tools such as Python, nltk, pandas, and numpy to perform the analysis.
- The analysis helped to track products listed for specific keywords on Amazon.

## Web Scraping and Automation

September, 2019 - 2021

## Web Scraping and automation

- Developed over 150+ automation bots for web scraping and data monitoring on websites.
- Used tools such as Selenium, BS4, Rotating Proxies, Multiprocessing, Browser signature masking, Flask, NodeJS, Cron Jobs.

## **▷** Education .....

BSCS 2021, FAST NUCES.

### Specialization in Computer Science - CGPA: 2.91

Courses included Databases, Programming, Algorithms, Operating Systems, Artificial Intelligence, Machine Learning, Bioinformatics along with various management and mathematical electives.

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