Rohan Tahir

AI/ML Engineer.

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Location
Lahore, Pakistan
(Willing to relocate)

Summary

ML/Web Engineer having diversified professional, research and freelance experience, with proficiency in Computer Vision, Signal Processing, Natural Language Processing, Machine Learning, Deep Learning, and Web Solutions. Looking to join a company where I can further employ my skills and education for the mutual growth.

Education

Comsats University, Lahore

MS (Computer Sciences) – 2020.

FAST National University of Computer and Emerging Sciences

BS (Computer Sciences) – 2017.

Abdul Salam College for Boys, Faisalabad

F.Sc – Pre-engineering – 2011.

Divisional Model College Faisalabad

Matriculation – 2009.

Skills & Tools

Skills:

Artificial Intelligence, Machine Learning, Computer Vision, NLP, GPT, Prompt Engineering, Generative AI, Deep Learning (Transformers, GAN, Auto-Encoders, CNN, Signal Processing, Segmentation, Classification), ML Deployment, Web Scrapping, Desktop Automation, Exploratory Data Analysis, Data Augmentation, Complex problem solving, Web Development(Front-End & Back-End).

Language & Libraries:

Python, HTML, PHP (MVC), Javascript, FLASK, SQL, Docker, Salenium, Image Processing (OpenCV, Matlab, Python), Pytorch, Tensorflow, Keras, Nodejs, JAVA, C++.

IDE/Tools:

Visual Studio Code, Anaconda, Google Colab, Git, Matlab, Mathematica, Eclipse, Xampp/Wamp Server, Jupyter Notebook, Postman, MySql server, IReports.

Work Experience

1. **Punch, Lahore (June 2022 – Currently)**

   Working as Senior AI/ML Lead Engineer, with following responsibilities:

   - Develop an End-to-End SaaS based application that can do accurate lip-syncing from the input audio to a facial video in high resolution.
   - NLP and AI based product that has smart-box functionality, which efficiently facilitates the sales person in when, who and how to contact the lead.
   - Worked on email intent classification and effective auto response generation to scenario provided as input.

2. **Evam Istanbul, Turkey (March 2021 – July 2022)**

   As a Senior Machine Learning Engineer, worked with Evam, remotely with the following responsibilities:

   - Working on Real-time football match analysis using video processing to track Football and players of different teams in the ground. Create bird's eye view of complete ground. Record different stats on the go.
   - Worked on ML based product to implement and develop a complete end to end Dynamic audio services (RESTAPI) including speaker identification, verification and diarization on custom voices in Turkish language.

- Scrapping all images from any ecommerce website using python based libraries. Image searching from the specified folder that are most similar to the query image.

3. **SlimLogix, Lahore (Nov 202 – March 2021)**

As a Machine Learning/AI Engineer, I have worked with the following responsibilities:

- Research and Development of GAN based computer vision projects.
- Build reusable code and libraries for future use.
- Automate Training of ML models and deployment using FLASK based API.
- Worked on various NLP and Computer Vision projects.

4. **Comsats University**, Lahore, Pakistan **(Sept. 2018 – August 2020)**

Worked as a research assistant for the project funded European Union's Horizon 2020 research and innovation programme under the Marie Skodowska-Curie grant.

5. **E-Learn Punjab PITB (July 2017 – August 2018)**

As a Program Officer at E-Learn Pubjab, I have following responsibilities/duties:

- Design and development of Customer Relationship Management (CRM) based solutions in PHP framework and MySQL.
- Development of UI dashboard in JavaScript.

6. **Invictus Zone, Faisalabad (Feb , 2017 – July, 2017)**

Worked as a Jr. Software Engineer, I have worked with the following responsibilities:

- Backend development using PHP.
- Front-End using HTML, CSS, JavaScript.

Research & Projects

1. **Leads Extraction (Python, AI, Automation, Django, MongoDB, Selenium, Dialog-flow)**
An automated complete process to extract sales data from scraping different platforms. Leveraging AI and ML to extract the most suitable leads which can enhance the efficiency of sales process.
2. **LipSync and automation of aftereffect using python (Deep Learning, Python, Automation)**
A complete working product which can take text as an input convert it into realistic speech audio. The converted audio then converted into a human seamless lip-synced video of high resolution. In this product automation of aftereffect was also done which add some animation to generated video.
3. **Web-Based mortgage system for real estates (Node.js, PHP, AWS, REST API, JQuery, Stripe API)**
A complete web based system having all the functionalities like customer authentication, payment integration using stripe, upload and retrieve data from AWS bucket. Dynamic functionalities like add new blogs from the dashboard etc.
4. **AI auto email generator (GPT, Scrapping, Automation, Django, Python MongoDB)**
An intelligent auto reply tool which can scrap the given website and generate an efficient email based on scrapped data.
5. **Xouno AI based email marketing system for sales (LLM, NLP, Flask, Python)**
An end-to-end dynamic email automation tool which can detect intent of email reply and classify the stage of prospect from sales proposal to deal close and after sales. All system was automate and powered with ML and AI based techniques.
6. **Dynamic Audio processing system (Signal Processing, Deep Learning, Python)**
Developed a complete end-to-end Dynamic intelligent audio processing (NLP) system that can efficiently does speaker identification, Speaker Diarization, Speaker Verification on custom audios (Turkish Language).
7. **Masters Research: Voxel Based Geometric Modeling From Single 2D Image Using Deep Learning.**
Worked research thesis in which 3D model of an object is reconstructed from single 2D image using advanced neural network based techniques. Published a research paper (**Voxel-Based 3D Object Reconstruction from Single 2D Image Using Variational Autoencoders**) in a journal with an impact factor of 2.258. URL of article*:* *https://www.mdpi.com/2227-7390/9/18/2288*.

8. **Progressive GAN to Extract Finger Print from noisy image (Computer Vision, Deep Learning)**
   An implementation of a research paper from scratch in which fingerprints are extracted from the noisy images taken from the crime scene. It can generate the output of extracted fingerprints in high definition.

9. **Web Based Project: Independent Collaborator (PHP,HTML, MySql, JavaScript, JQuerry)**
   A social media based site where users can collaborate with one another. It has all the important social media features i.e. chatting, post sharing etc.
10. **Final Year Project: PLANTICO (Machine Learning, Image Processing, Research Based)**
    A system that can provide faster and accurate detection of diseases on plant leaf. If leaf is defected the system provides the optimal solution. It can reduce farmer's efforts and time to cure the disease.

Activities, Honors & Awards

- Published a research article in an international impact factor Journal MDPI. https://www.mdpi.com/2227-7390/9/18/2288.
- Best performer at 3rd Programmer's battle 101 at FAST NUCES.
- MY FYP Plantico project was awarded as top 12 winners in National ICT Grassroots Research Initiative (NIGRI) competition.
- Participate in Technical event competition at MUST'15 of Mirpur University.

Interests & Hobbies

- Web surfing for learning new skills and exploring new trends in the field of technology
- Travelling.

References

Will be provided on demand.