Muhammad Ahsan Farooqui

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SUMMARY

Ahsan is a data science professional with over 5 years of experience working in AI, machine learning, and data science with overall 9 years of working experience. He is currently working as a senior data scientist at Afiniti. Previously, he worked as AI Research Engineer at Knowledge Platform, an ed-tech company. Ahsan has an advanced degree in Data Science from Pakistan. In his free time, he volunteers for the Institute of Electrical and Electronic Engineers (IEEE).

SKILLS

Languages: Python,R,C++, SQL. Familiar with HTML/CSS/JS/PHP
ML & Python Packages: Pytorch, Tensorflow, Scikit-learn, Pyswarms, NLTK, PyeasyGA, Pandas, Numpy
Visualization Tools: PowerBI, Tableau, d3.js

Deployment: Azure VMs, Linux servers, Flask, Gunicorn, Supervisord, Git
Operating Systems: Windows & Linux.

EDUCATION

MS in Data Science
National University of Computing and Emerging Sciences
Research Area: Open-set Classification of Point Cloud Objects (Paper in process of publishing)
2020 - 2023

BS in Electronic Engineering -
Ghulam Ishaq Khan Institute of Engineering Sciences and Technology
2009 - 2013

LINKS

- github
- linkedin

ACTIVITIES & AWARDS

2023 - Certified AI Developer - PIAIC

2018 - Data Science Training - Dice Analytics

2017 - IEEE MGA Innovation Award as part of IEEEmadC Team

2018-2022 - Participated in multiple hackathons & volunteered for ICLR 2022 and Neurips 2021

EXPERIENCE

Afiniti - Senior Data Scientist   January 2023 onwards
- Responsible for maintaining positive revenue for a European Client by keeping the AI models up to date.
- Day-to-day monitoring of the sales through call center's performance, optimizing the algorithms to ensure revenue is maximized.

Knowledge Platform - AI Research Engineer   January 2019 to January 2023
- Led a team of research engineers to create novel solutions based on graph neural networks, particle swarm optimization, and genetic algorithms. Implemented evolutionary algorithm-based diagnostic tests and a deep learning-based recommendation system to optimize learning.
- Guided the company in leveraging AI to transform their ed-tech product. Conducted workshops, presented case studies, and coordinated cross-team education to educate both tech and non-tech employees on AI. Prepared SQL databases and created stored procedures for AI API transactions.
- Facilitated quality assurance and deployment teams to create use cases for testing AI-based recommendation systems. Set up virtual machines, deployed applications with Nginx, Supervisor, and Flask. Brainstormed and created queries and dashboards for management reports and business decisions.

Openware Business - AI Team Lead   March 2018 to December 2018
- Successfully delivered Proof of concept to Nayatel (an Internet Service Provider) for Automated Network Monitoring and Troubleshooting through Virtual Agents.
- Also worked with National Disaster Management Authority (NDMA) to develop a customized humanitarian platform based on Sahana Eden.

LCC Pakistan - 3G Optimization Consultant   August 2016 to January 2018
- Responsible for optimizing 3G RF swap activities, maintaining, and keeping KPIs above the acceptable thresholds.
- Worked on the successful merger of Jazz/Warid networks, enabling 3G access for Warid customers.

Ericsson Pakistan - Radio D&O Engineer   September 2013 to June 2016
- Design Engineer for 2G Swap project for ALU-Ericsson Swap, TRX expansions, 3G rollout project

PERSONAL PROJECTS

- Trained PointNet for point clouds dataset with over 80
- Wrote source code for Yolo from scratch to detect car number plates (dataset had labels in Pascal VOC format)
- Trained vanilla GANs from scratch in MNIST data to generate handwriting recognition images from noise.
- Used multi-layered fully connected layers for generator and discriminator models.
- Trained a convolution auto-encoder to reproduce images to study various aspects of encoder-decoder models and transposed convolutions.
- Implemented an Urdu Poetry generation algorithm using n-gram models.
- Explored bidirectional and backward n-gram models.
- Implemented a roman Urdu spell checker using noisy channel models
- Trained Naïve Bayes and Boolean Naïve Bayes classifiers to detect fake news.

VOLUNTEERING

IEEE - Member MGA Trainings Committee   2023 - Onwards
- Part of a global team that facilitates the volunteer leadership training program and learning portal.

IEEE Islamabad Section - Secretary   2021 Onwards
- Managing IEEE activities in Islamabad Section including approving conferences for technical sponsorships, facilitating members for students, young professionals, and women in engineering activities as well as working to bridge gaps between industry and academia.