Umar Farooq

Nationality: Pakistani

(+92) 03034869420

Date of birth: 20 Dec 1997

Gender: Male

Email address: imumarfarooq97@gmail.com

Skype : +923034869420

Whatsapp Messenger : +923034869420

LinkedIn : www.linkedin.com/in/umar777

Twitter : https://twitter.com/UmarSilicon

Github: : https://github.com/imumarfarooq

Medium: : https://medium.com/@imUmarFarooq

Address: Street # 14, House # 1283 Makkah Colony Gulberg3, , 54000 Lahore (Pakistan)

ABOUT ME

I, Umar Farooq, a technology and data enthusiast who has enjoyed a diverse and progressive career across multiple information and data technology fields. I am passionate about finding new ways to make processes more agile and productive, turning data into information and information into useful knowledge. I enjoy and seek new challenges, especially those that helps to improve efficiencies and impact society . With every new challenge that I have encountered, data has been the most powerful asset to gain insights and guide me to a solution.

EDUCATION AND TRAINING

Bachelor in Computer Science

University of Engineering and Technology [20 Nov 2015 – 31 Aug 2019]

Address: Lahore (Pakistan)

Field(s) of study: Information and Communication Technologies

Final grade : 3.552 / 4.0

HSSC (Intermediate)

Superior Group of Colleges [15 Aug 2013 – 12 Sep 2015]

Address: 54000 Lahore, (Pakistan)

SSC (Matric)

Jinnah Public Secondary School [10 Apr 2011 – 25 Jun 2013]

Address: 54000 Lahore, (Pakistan)

WORK EXPERIENCE

Computer Vision Internee

Giscle Systems Pvt, LTD. [1 Dec 2017 – 28 Feb 2018]

Address: Bengaluru (India)
City: Bengaluru
Country: India
- **Business or sector:** Professional, scientific and technical activities

- This internship aims to learn and implement deep learning algorithms.
- The main purpose is to work on ***object detection models*** and test them on local data sets.
- My team's responsibility is to implement and test various detection algorithms on multiple frameworks, such as ***TensorFlow*** and ***Keras.***
- Their final results are based on real-time object detection predictions.
- The accuracy of the algorithm depends upon their precision and statistical report.

Jr. Data Researcher

Dutch Autonomous Mobility [5 Mar 2018 – 10 Dec 2019]

City: Amsterdam
Country: Netherlands

Computer Vision Engineer

Dutch Autonomous Mobility [5 Sep 2019 – Current]

Address: Amsterdem (Netherlands)
City: Amsterdam
Country: Netherlands
Name of unit or department: Autonomous System - **Business or sector:** Professional, scientific and technical activities

- ***Dutch Autonomous Mobility*** is a scientific research organization. The company deals with technical and programmatically issues of autonomous mobility and provides results based on the research and testing.
- The company provides multiple services to research, implement, and test various detection algorithms to improve autonomous device's accuracy.
- My responsibility is to read scientific papers and implement them. To implement these algorithms and compare their results based on their statistic parameters and get the optimal model.

ORGANISATIONAL SKILLS

NFC-IEFR Jazba'19 — Event Manager

Successfully organized and planned the academic and recreational events at the Department of Computer Science at University. It includes multiple types of in-door technical and non-technical activities that improve the institute's reputation and boost student's confidence, self-awareness, concentration, and self-esteem.

PROJECTS

Software-Defined Future Access Network Architecture for MAC Layer Scheduling

In this project, we proposed an (SD-FAN) architecture that can replace the hardware-based bandwidth distribution component with a software-based bandwidth distribution component. In our proposed SDN architecture, the controller helps control the flow of data traffic by segregating the traffic into two types; one for high priority (HP) data traffic and the other for low priority (LP) data traffic. Our performance investigation validates the effectiveness of this new access network architecture. It shows that (SD-FAN) achieves less traffic delay and provides a better quality of service differentiation than traditional EPONs architectures.

Dog Breed Classifier using CNN Architecture

We tried to build a dog breeds classifier using a ***Convolutional Neural Network***. With the help of Keras, it's easy for us to not only make the CNN model but also test different transfer learning pre-trained models to test our model performance and get better accuracy to classify our objects. We implement CNN and used VGG-16, Resnet50, and Inception transfer learning models to test their data accuracy.

Disaster Response Pipeline

In this project, I'm applying Data Engineering techniques to analyze the data from Figure Eight to build a classification model for an API that classifies the Disaster message into one of the given 36 categories and contact the particular category company to help these peoples.

Detection of Suspicious Content of Websites

The project aims to detect such web pages that cause the conflict between Shia and Sunni. A web app-based GUI is developed. Once a user enters a URL of any web page, the whole data of that web page is crawled, and based on our fetched training data; it classifies that web page as suspicious or not suspicious.

Recommendation of Articles with IBM

In the Recommendation of Articles with IBM project, I analyze users' interactions with articles on the IBM Watson Studio and make recommendations about new likely articles. Though the dashboard is just showing the newest articles, I could imagine having a recommendation board available here that shows the most pertinent articles to a specific user.

Survival Prediction in the Titanic Disaster

In this project, I will go through finding those factors that affect the survival rate prediction in the titanic disaster. I've to use the famous titanic dataset that available on Kaggle.

DIGITAL SKILLS

Python / C++ / SQL / Git / LaTeX / Basic of Linux / Machine Learning / Deep Learning / Numpy / Matplotlib / Pandas / Tensorflow / Keras / OpenCV / Scikit-Learn / Seaborn / Octave/MATLAB / Tableau (data analysis) / IBM Watson Studio / Statistical and Analytics Tools (IBM SPSS, R Studio, Jupyter Notebook, Zeppelin, IBM Watson Studio)

PUBLICATIONS

Software Defined Future Access Network Architecture for MAC Layer Scheduling

[2019]

DOI:10.13140/RG.2.2.28532.78722

We proposed a Software-Defined Future Access Network architecture that can replace the hardware-based bandwidth distribution component with a software-based bandwidth distribution component. The bandwidth distribution component permits pluggable bandwidth distribution algorithms among multiple ONUs adaptive to traffic scenarios and network operational conditions. In our proposed SDN architecture, the controller helps control the flow of data traffic by segregating the traffic into two types; one for high priority (HP) data traffic and the other for low priority (LP) data traffic. We have to compare our proposed SDN architecture for Future Access Network with the traditional optical access network architecture. Our performance investigation validates the effectiveness of this new access network architecture. It shows that the Software-Defined Future Access Network achieves less traffic delay and provides a better quality of service differentiation than traditional EPONs architectures.

HOBBIES AND INTERESTS

Endurance Sports

Engaging in an endurance sport such as cycling, Football, Cricket shows **dedicated**, **focused**, and the **capability of working alone**. Participation in a team-based sport improved leadership skills and teamwork abilities.

Blogging

Learning about technologies and write about them, improve communication, and writing skills.

HONOURS AND AWARDS

PASTIC-UAF Expo

Pakistan Scientific and Technological Information Center

It's a scientific project exhibition, where people all over Pakistan from different institutes students participate in it. I am honored because am selected from the university's intra-project exhibition to participate in PASTIC.

IEEE Deep Learning Hackathon

University of Engineering & Technology, Lahore

In the hackathon, working with the team to build a deep learning CNN classifier to classify the dog breeds. Reached the final and honored to get the runner-up award.

LANGUAGE SKILLS

Mother tongue(s):

Urdu , Punjabi

Other language(s):

English

LISTENING C1 **READING** B2 **WRITING** B2

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** B2