# **Omar Irfan Khan**

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### **SUMMARY**

Recent graduate with 2 years of experience in researching, designing, building and testing distributed systems. Now looking to utilize expertise understanding in aspects of AI / software development to continue professional development.

### **SKILLS**

Programming Languages: Python, C++, Java, Bash, SQL, R

Frameworks / Tools used: TensorFlow, Scikit-Learn, SimpleITK, OpenCV, Nibabel, Numpy, Keras, Pandas, Anaconda, Jupyter Notebook, Docker, Git, Matplotlib, Seaborn, Flask, Tableau, Power BI, Matlab, PostgreSQL, Microsoft Azure, AWS EC2, AWS Elastic Beanstalk, AWS S3, AWS RDS

Language Skills: English, Urdu/Hindi, Arabic (Basic)

### **EDUCATION**

Masters of Science in Computer Science (Image Processing Algorithms, Soft Computing, Advanced Soft Computing and Fundamentals of Computer Security)

University of Guelph · Guelph, ON · 2020 · 3.54/4.00

**Bachelors of Science in Computer Engineering** 

American University of Ras Al Khaimah · Ras Al Khaimah, United Arab Emirates · 2017 · 3.15/4.00

### **EXPERIENCE**

## Research Assistant

University of Guelph

January 2018 - December 2019, Guelph, ON

- · Implemented a novel classification technique to automatically distinguish gliomas and normal brain images.
- · Designed a hybrid method involving density based algorithms and thresholding.
- $\cdot$  Attained an accuracy of 97% and minimal run time.

## **Teaching Assistant**

University of Guelph

January 2018 - December 2019, Guelph, ON

• Taught and assisted professors with courses such as: Discrete Structures in Computing I, Structure and Application of Microcomputers, Software Engineering and Database Systems.

### **Cyber Security Intern**

**Advanced Team Solutions LLC** 

June 2016 - September 2016, Ajman, United Arab Emirates

- · Organized and implemented several intrusion detection systems and commercial grade firewalls.
- · Installed new IP telephony and tape storage systems on site.
- · Built a program to recover 80% of lost data from storage devices which saved the company from losing a major customers.

### **PROJECTS**

#### **Emoto**

- · Deployed an android diary application on play store which analyses user emotions and classifies them into happy, neutral or sad.
- · Programmed models such as LSTM, BERT and VADER to centralize them on an AWS EC2 instance.
- · Machine learning models such as BERT achieved an accuracy of 92% and LSTM achieved an accuracy of 90%.

### Twitter trends

- · Deployed a pipeline to set up streaming between various AWS services.
- · Programmed spark for streaming and for analyzing the data.
- · Designed a real time dashboard using flask which shows the current trending hashtags.

### **EXTRACURRICULAR ACTIVITIES**

· Table tennis, Volunteering and Hiking.