# M. Kamran Janjua

Curriculum vitae

House # 723, Block G-4, Johar Town Lahore, Pakistan # +92 (334) 439 5998 ⊠ mjanjua.bscs16seecs@seecs.edu.pk www.kjanjua26.github.io

### Education

2016-Present Bachelor of Engineering in Computer Science,

National University of Sciences and Technology (NUST), Islamabad, Pakistan.

CGPA - 3.63/4.00, Percentage - 91%

2014–2016 Higher Secondary School Certificate (HSSC),

Pakistan International School, Doha, Qatar.

Percentage - 87%

# Experience

2016-Present Research Assistant at TUKL-NUST Research and Development Center, NUST, Islamabad, Pakistan.

> TUKL-NUST is a research and development center setup by a joint collaboration of TUKL, Germany, and NUST, Islamabad. Following is a roughly chronological overview of my work in the lab.

Real Time Scene Text Detection & Recognition

Optical Character Recognition for scene images is a rather very important and difficult task. My work was to research and implement an end-to-end trainable architecture and deploy it on IOS to achieve real time results. The IOS model runs on 30fps currently.

Postal Address Parsing

Parsing of non-standardized addresses is a challenging task since many standard sentence taggers fail to perform well on non-standardized postal addresses. I worked to implement an end-to-end trainable deep learning based solution to tackle the problem. Additionally, I have submitted a paper regarding this to ACL 2018.

Underwater Video Data Collection of MahSheer in Murky Waters

Data collection is an extremely important part of data driven solutions. I was active in a small group working to collect underwater videos of an endangered specie for non-invasive sampling for a project funded by DAAD, Germany. We designed a system to capture underwater videos in the rivers.

2015–2016 Research Intern at Al Kindi Lab for Computing,

Qatar University, Doha, Qatar.

Al Kindi Research Lab is a research center focusing on research in the vital area of computer and information sciences and engineering. Following is the detail regarding the project I worked on while interning in the lab.

Synchronous Drone System for Building Surveillance

Real time feedback regarding the under-construction building is crucial to stable construction. I worked on building synchronous drone system for under-construction building surveillance. My work was focused on assembling the drones and synchronizing them. The drones were built using ardupilot.

## 2017–2018 Teaching Assistant for Fundamentals of Computer Programming,

School of Electrical Engineering & Computer Science, NUST, Islamabad, Pakistan. I was teaching assistant for the introductory computer science course. My main responsibilities were to grade assignments, quizzes and end semester projects. Additionally, I had to deliver a brief lecture once a week.

## Awards and Accolades

- 2017 Dean's list for high achievers (all semesters)
- 2016 Gold Medal, HSSC-II, 1st in batch
- 2015 Silver Medal, SSC-II, 2nd in batch

### Standardized Scores

- IELTS 8.5 Listening. 8.0 Reading. 7.0 Writing. 7.5 Speaking.
  - ACT 27 overall.
- ACT English 36/36 Writing

### Skills

C, C++ I can program in C and C++ well. I did my data structure's coursework and project in C++. Code: https://github.com/kjanjua26/Algorithms.

Python, Python combined with NumPy is my primary framework for rapid prototyping and NumPy, almost all of the research work done in lab is in Python.

OpenCV

TensorFlow, I have used Keras and Tensorflow to train models on CPU and GPUs in the past.

PyTorch, Recently, I've shifted to PyTorch because I find the dynamic graph generation Keras extremely convenient.

Linux, Vim, I managed a linux based multi-GPU server of TUKL-NUST Lab for a almost 6 Bash months.

#### Interests

Problem Solving

Cooking

Reading

Writing

Playing Guitar

Teaching

#### MOOCs

- Learning from Data
- Convolutional Neural Networks for Visual Recognition
- Deep Learning with Tensorflow
- Deep Learning for Self Driving Cars
- Statistics 110: Probability
- Convex Optimization