Kamran Janjua

Curriculum vitae

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Education

2016–Present **Bachelor of Engineering in Computer Science**,
National University of Sciences and Technology (NUST), Islamabad.
CGPA - 3.63/4.00, **Percentage - 91%**

2014–2016 **Higher Secondary School Certificate (HSSC)**,
Pakistan International School, Doha.
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, NumPy, OpenCV Python combined with NumPy is my primary framework for rapid prototyping and almost all of the research work done in lab is in Python.

TensorFlow, PyTorch, Keras I have used Keras and Tensorflow to train models on CPU and GPUs in the past. Recently, I've shifted to PyTorch because I find the dynamic graph generation extremely convenient.

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

Interests

- Problem Solving
- Reading
- Playing Guitar
- Cooking
- Writing
- 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