Syed Waleed Hyder

Curriculum vitae

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Education

2016–Present **Bachelor of Engineering in Computer Science**,
National University of Sciences and Technology (NUST), Islamabad, Pakistan.
CGPA - 3.74/4.00, **Percentage - 93%**

2014–2016 **Higher Secondary School Certificate (HSSC)**, *Pakistan*
IAdamjee Govt. Science College, Karachi, Pakistan.
Percentage - 88%

Experience

2018–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 Vehicle Detection & Tracking in infrared video-feed
Real time vehicle detection and tracking in infrared video-feed for self-driving cars is a rather very important and difficult task. My work is to research and improve the existing techniques to detect and track the vehicle objects from a non-polarized infrared video feed in real time.

2018–Present **Research Assistant at CVML Lab**, *NUST, Islamabad, Pakistan*.
The Computer Vision and Machine Learning (CVML) Lab is a research lab in the Department of Robotics and Artificial Intelligence at National University of Sciences and Technology. Following is a roughly chronological overview of my work in the lab.
Vehicle tracking in unconstrained natural scenes using Siamese networks and Kalman Filter
My work as a team member was to research and implement an end-to-end trainable architecture and deploy it on TensorRT to achieve real time results.

2017–Present **Freelancer on Upwork**,
RSA Encryption
My client wanted to implement the RSA algorithm, modify it according to the latest research and comparing the results.

2017–2017 **Development Intern at Solterm Solutions**,
Karachi, Pakistan.
Solterm Solutions is a software house focusing on development of retail POS software systems. Following is the detail regarding the project I worked on while interning in the lab.
Phonebook using basic data structures and SQL database

Awards and Accolades

2016 -2018	Dean's list for high achievers (all semesters)
2018	Prime Minister's Laptop Scheme (awarded with a laptop on GPA-based merit)
2014	Merit scholarship, SSC-II, 22nd in batch

Skills

C, C++	I can program in C and C++ well. I did my data structure's coursework and project in C++.
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, Keras	I have used Keras and Tensorflow to train models on CPU and GPUs.
Linux, Vim, Bash	I use a Linux based CPU for almost an year.

Interests

- Problem Solving
- Teaching
- Reading
- Writing

MOOCs

Learning from Data

Convolutional Neural Networks for Visual Recognition

Convex Optimization

Deep Learning with Tensorflow