Dr. Asif Rajput

rajputasif.github.io| engineer.asifali@gmail.com

EDUCATION

TU-BERLIN
PhD in Computer Vision
2014 - 2018 | Berlin, DE
Computer Vision
3D Reconstruction
SLAM
Robotics

NUST
MSc in Computer Engg.
2009 - 2011 | Islamabad, PK
CGPA: 3.25 / 4.0
Digital Image Processing
Computer Vision

QUEST
BE in Computer Systems Engg.
2004 - 2009 | Nawabshah, PK
Percentage: 82.78%
Robotics
Embedded Systems
IoT

LINKS

Github:// **rajputasif**
LinkedIn:// **rajputasif**

SKILLS

PROGRAMMING
Over 5000 lines:
JavaScript • Matlab • LaTeX
Over 10000 lines:
C++ • Python

TECHNOLOGIES
OpenCV • SLAM • AI / ML
3D Reconstruction • GIT • ROS
PyTorch • Tensorflow • Docker

EXPERIENCE

KODIFLY LIMITED | Senior AI Engineer & Development Manager
March 2023 – Ongoing | (Remote)
- Actively developing a hybrid image and LiDAR fusion based system to accurately detect vehicles in extreme conditions using deep learning techniques.
- Managing a diverse team consisting of back-end, front-end and AI engineers.

CENTER OF EXCELLENCE FOR ROBOTICS, AI AND BLOCKCHAIN | Senior Researcher (Robotics)
June 2020 – March 2023 | Sukkur, PK
- Developed and **patented** (pending) a device to automate the digitization process of handwritten documents, forms using CV and Deep learning.
- Led CRAIB's robotics cluster of enthusiast python engineers to develop a deep learning based surveillance system for vehicle detection, tracking, speed analytics, management and so more.and Scala using Play

NUST | Assistant Professor
Feb 2019 – May 2020 | Islamabad, PK
- Supervision and mentor ship of students/researchers to expand the frontiers of CV/ML research.

GERMAN AEROSPACE CENTER (DLR) BERLIN | PhD Researcher
Oct 2014 – Sep 2018 | Berlin, DE
- Design and Implementation of a generalized novel 3D reconstruction framework capable of handling various sensor devices (such as RGBD cameras, LiDAR and StereoVision).
- Developed and **patented** a decentralized system with Tailor made-MQTT protocol to facilitate remote visualization of 3D reconstruction.

SUKKUR IBA UNIVERSITY | Lecturer (Computer Science)
Feb 2012 – Jun 2014 | Sukkur, PK

RESEARCH AND DEVELOPMENT*

PATENTS AND PROJECTS
- Patent 1: Color Selector Module for LS image compression
- Patent 2: System and method for extracting handwritten text using ML (pending)
- Online 3D viewer [live-demo]
- SmoothFusion [video]

PUBLICATIONS | Full list: ORCID:/0000-0002-0157-129X
- SmoothFusion
- Multi-Sensor Depth Fusion
- Offline HTR
- 3D PCL Segmentor
- Color Selector for lossless compression

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