Mallikarjun BR

http://mallikarjun26.github.io/
mallik.jeevan@gmail.com | +919964421652

EDUCATION

INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY - HYDERABAD (IIIT-H)
MS by Research in Computer Science
July 2016 | Hyderabad, India
Cum. GPA: 8.66 / 10

R V COLLEGE OF ENGINEERING (RVCE)
BE in Electronics and Communications Engineering
July 2011 | Bangalore, India
Cum. GPA: 9.35 / 10
(Top 10 in department)

LINKS

Github:// mallikarjun26
LinkedIn:// mallikarjun26

SKILLS

Python • Lua • Matlab • C++
Torch • Caffe • Tensorflow

COURSEWORK

GRADUATE
Machine Learning
Statistical Methods in AI
Optimization Methods
Computer Vision
Digital Image Processing
Information Retrieval and Extraction
Introduction to Robotics

UNDERGRADUATE
Artificial Neural Networks
Signals and Systems
Digital Signal Processing
Computer Organization and Architecture

AWARDS

•Secured a rank of 259 among 120,000 students in a common entrance test for Engineering in Karnataka, India
• Awarded Infineon Scholarship for academic excellence at RVCE.
• National level 17th rank in Mathematica (National Level Maths Exam)

RESEARCH EXPERIENCE

MERCEDES BENZ RESEARCH AND DEVELOPMENT INDIA | Senior Software Engineer
Feb 2017 – Present | Bangalore, India
Gesture Recognition - Hand gesture retrieval and detection model using only 2D CNNs on static hand pose feature space. Achieving over 2 point better F1 measure compared to LSTM based model. Extremely hardware friendly. Patent submission in process.
Head Pose Estimation - Single model to predict facial landmark detection and head pose estimation based on well known hourglass model.

MERCEDES BENZ RESEARCH AND DEVELOPMENT INDIA | Research Intern | Guide - Arjun Jain
Sep 2016 – Feb 2017 | Bangalore, India
Hand detection - Extensive experimentations and parameter tuning of state of the art object detectors like Faster RCNN, R-FCN, Single Shot Detector and YOLO for hand detection. Modified YOLO with 100 times lesser parameters found to be suitable for the task, which is also hardware friendly.
Human Pose Estimation - Framed as oriented object detection of body parts. Built over existing Single Shot Detector to also regress over deviation in angle from prior oriented boxes.

CENTER FOR VISUAL INFORMATION TECHNOLOGY, IIIT-H | Research Assistant | Guide - C V Jawahar, Visesh Chari
June 2014 – Sep 2015 | Hyderbad, India
Facial Landmark Detection - Facial landmark detection is a challenging problem. We observed complimentary results between existing methods such as mixture of trees and regression based methods. We proposed two algorithms to get the best of both worlds. This lead to a publication at WACV-2016
Face Frontalization - Face frontalization is the process of synthesizing a frontal view of a face, given its non-frontal view. We proposed an exemplar based method leveraging the fact that faces in general have a definite structure and can be represented in a low dimensional subspace. This lead to a publication in NCVPRIPG-2015

WORK EXPERIENCE

SOROCO INDIA | Junior Platform Engineer
Sep 2015 – Feb 2016 | Bangalore, India
Part of the platform team. I was responsible for building productivity measurement tool based on keyboard and mouse activity. Also built a task management portal.

JUNIPER NETWORKS | ASIC Engineer 2
July 2011 – Jan 2014 | Bangalore, India
Part of the ASIC team which delivered two generations of networking ASICs. Responsible for modeling and verifying arbiter module. I also contributed to full chip verification and gate level simulation.

PUBLICATIONS

Face Fiducial Detection by Consensus of Exemplars | WACV-2016 | New York
Efficient Face Frontalization in Unconstrained Images | NCVPRIPG-2015 | India

PATENTS

CNN based real time hand gesture recognition on streaming data (To be submitted)