Manogna Sreenivas

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EDUCATION

Indian Institute of Science

PhD in Electrical Engineering, CGPA: 9.0/10.0

National Institute of Technology Karnataka

B. Tech in Electrical and Electronics Engineering, CGPA: 8.72/10.0

Bengaluru, India Oct 2020-Present Surathkal, India Aug 2014- Apr 2017

Research Work

- Unsupervised Domain Adaptation: Designing methods to learn using labeled source along with unlabeled target domain data to obtain robust representations generalizing across domains.
- Cross-Domain Few Shot Learning: Designing effective methods capable of adapting a base model to an unseen task from an unseen domain given limited training samples.
- Source-Free Domain Adaptation: The objective is to adapt a model trained on a source domain to a target domain using only unlabelled samples.

Publications

• Improved Cross-Dataset Facial Expression Recognition by Handling Data Imbalance and Feature Confusion, Manogna Sreenivas, Sawa Takamuku, Soma Biswas, Aditya Chepuri, Balasubramanian Vengatesan, Naotake Natori, European Conference on Computer Vision Workshops (ECCVW), 2022

Relevant Coursework

Matrix Theory, Stochastic Models and Applications, Digital Image Processing, Advanced Image Processing, Pattern Recognition and Neural Networks, Advanced Deep Learning

TEACHING EXPERIENCE

E9241 Digital Image Processing

Teaching Assistant, IISc

Bengaluru, India July 2021 - Dec 2021

Deep Learning for Computer Vision

Teaching Assistant, NPTEL

Bengaluru, India July 2022 - Oct 2022

Work Experience

PathPartner Technology

Software Engineer

Bengaluru, India

July 2017 - August 2020

• Worked on CNN based Face Detection for Driver Monitoring System, porting Deep Convolutional Models to edge devices, developed SIMD vectorized algorithms to support TensorFlow APIs for Cadence Vision DSPs.

Wipro Technologies

Bengaluru, India

Intern

April 2017 - June 2017

• Worked on Pedestrian Detection module as a part of "Wipro Autonomous Vehicle" team, using HOG feature extractor and SVM as classifier.

TECHNICAL SKILLS

Programming Languages: C, Python Libraries: OpenCV, PyTorch, TensorFlow

ACHIEVEMENTS

- Recipient of the Prime Minister's Research Fellowship (PMRF), Jan 2022 Present.
- Secured a state rank of 254 in Joint Entrance Exam (JEE) Mains, 2013.
- Secured a rank of 172 in Karnataka Common Entrance Test (KCET), 2013.