Naren Doraiswamy

Personal Page: https://narendoraiswamy.github.io/

#63, 3RD CROSS,VHBCS, RAJARAJESHWARINAGAR

BANGALORE, KARNATAKA, 560098

+91-9945268946

MAIL LINKEDIN GITHUB

Research Experience:

IACV lab, Indian Institute of Science

Deep Learning and Computer Vision Research Assistant *Aug 2018 – Present*

- Worked on few shot Semantic segmentation to segment unseen novel classes.
- Working on developing a few shot semi-supervised domain adaptation algorithm from active learning perspective.
- Working on developing efficient domain adaptation algorithm under data imbalance constraint.

Student Satellite Program, Indian Space Research Organization

Research Intern *Jan 2015 - July 2015*

- Worked on implementing the kalman filter to obtain better estimates of gyro sensors.
- Worked on implementing extended kalman filter for attitude control of the satellite.

Publications:

Weakly Supervised Few-shot Object Segmentation using Co-Attention with Visual and Semantic Inputs.
Mennatullah Siam***, Naren Doraiswamy*,** Boris Oreshkin*, Hengshuai Yao**,** Martin Jagersand. **IJCAI 2020 (Acceptance Rate: 12.6%)**

One-Shot Weakly Supervised Video Object Segmentation.
Mennatullah Siam***, Naren Doraiswamy*,** Boris Oreshkin***,** Hengshuai Yao**,** Martin Jagersand**.** Accepted at **ICLR PML4DC workshop 2020**

In Preparation:

Adversarial Active learning for imbalanced domain adaptation scenario.
With Dr. Soma Biswas (To be submitted to WACV 2021)

Online Active learning for semi-supervised domain adaptation.
With Dr. Soma Biswas (To be submitted to AAAI 2021)

Work Experience:

Robert Bosch, India

Associate Software Engineer *Aug 2016 – July 2018*

- Worked in developing data based models in component model team for engine management systems.
- Developed Machine learning models for key engine parameter estimations like common rail pressure, turbo-charger lag which were used in Vehicle simulation modules.
- Initiated the development of inference model for Cylinder fill correction factor using calibrated data from OEMs.
- Also worked on model predictive control systems for developing the HiL models.
- Keynote speaker at Bosch Technical Forum.

Udacity Deep Learning Mentor and Code Reviewer *January 2018 - Present*

- Providing actionable and helpful feedback to student projects in their code development.
- Advice on technical topics, explanation of incorporating and building efficient deep learning models.

Education:

RNS Institute of Technology, Bangalore

Bachelors' of Engineering(Honors) in Electronics and Communication, *August 2012- June 2016*

- Percentage: 79.14%.(Top 5% in class) Converted GPA(According to WES): 3.79/4.0

Thesis: A numerical framework for GPR feature extraction and simulation using FDTD algorithm.

SBM Jain College, Bangalore
Pre-University Education, Class 12, *June 2010- Mar 2012*

- Percentage: 94.68%.

Non degree Education

Computer Vision Foundation Nanodegree	**March 2018-May 2018**
Machine Learning Engineer Nanodegree	**July 2017 – Feb 2018**
Deep Learning Foundation Nanodegree	**Jan 2017– July 2017**

Skills:

Programming skills:

- Python, C, C++, Matlab, Bash.

Toolkits/Packages:

- Pytorch, Tensorflow, OpenCV, Caffe

Awards and Honors:

- Ministry of human resource development scholarship [MHRD], Govt. of India.
- Social welfare Scholarship.
- International Science Olympiad Finalist 2012.
- Jnanamitra Pratibha Puraskara award for outstanding performance in 10th Board Examination.

Extracurricular activities:

- District level football player.
- President of the science and literary club in School.

Volunteer Experience:

- **AI AMBASSADOR** @ Nurture.ai: I teach deep learning every Saturday at a community meetup and aim towards building a passionate and efficient AI community in the city.

- **Bosch CSR group**: Part of the group which taught mathematics and science classes for underprivileged high school kids.

- **MUST Research Club:** Part of the enthusiastic AI non-profit group headed by the principal researcher of Salesforce, India which holds and organizes seminars, classes and collaborates to solve AI problems.