Shishira R Maiya

Email : shishira@umd.edu
github.com/abhyantrika

EDUCATION

- **University of Maryland** — College Park, USA
  PhD under Prof Abhinav Shrivastava — *May 2021 – Current*
- **University of Maryland** — College Park, USA
  Master of Science in Computer Science; GPA: 3.92 — *Aug 2019 – May 2021*
- **Ramaiah Institute of Technology** — Bangalore, India
  Bachelor of Engineering in Computer Science and Engineering; GPA: 3.77 (8.91/10.0) — *Aug. 2014 – July. 2018*

PUBLICATIONS

- S.R. Maiya, M. Ehrlich, V. Agarwal, S. Lim, T. Goldstein, A.Shrivastava; A Frequency Perspective of Adversarial Robustness *Under Review*

- A. Bagmer, S.R. Maiya, S. Bidwalker, A. Deshpande; Membership Inference Attacks on Lottery Ticket Networks *ICML workshop, 2021*

- S. Girish, S.R. Maiya, K.Gupta, H.Chen, A.Shrivastava, L.Davis; The Lottery Ticket Hypothesis for Object Recognition *CVPR 2021*

- S.R. Maiya and Puneet Mathur; Rethinking Retinal Landmark Localization As Pose Estimation: Naive Single Stacked Network For Optic Disk And Fovea Detection. *ICASSP, 2020*

- S.R. Maiya and S.Chandra Babu; Slum Segmentation and Change Detection : A Deep Learning Approach. *NeurIPS (NIPS) ML4D Workshop, 2018.*

- S.Chandra Babu, S.R. Maiya, and S. Elango; Relation Networks for Optic Disc and Fovea Localization in Retinal Images. *NeurIPS (NIPS) ML4Health Workshop, 2018.*

EXPERIENCE

- **Apple Inc** — Cupertino,CA
  Computer Vision Intern — *June 2020 - August 2020*
  - **SIML**: Worked in SIML (System Intelligence and Machine Learning) Team on the problem of Table Structure Recognition.
- **University of Maryland** — College Park,MD
  Graduate Researcher: Prof Abhinav Shrivastava — *Present*
  - **GARD**: Working on a DARPA funded project in the domain of adversarial robustness.
- **Indian Institute of Science** — Bangalore, India
  Research assistant: Prof Raghu Krishnapuram — *July 2018 - July 2019*
  - **Smart Cities**: Worked on deep learning based multi-camera multi-object detection and tracking for the Government of India.
  - **MBZIRC drone challenge**: Handled the vision requirements for the IISc team and deployed deep learning models on the edge.
- **Hyperverge Inc** — Bangalore, India
  Deep Learning intern — *Jan 2018 - Jun 2018*
  - **e-KYC**: Built and deployed a pipeline for deep learning based object detection, scene text recognition for real time Know Your Customer service for a major international bank.
  - **Deep OCR engine**: Implemented and deployed a CRNN based OCR engine in Tensorflow

PROJECTS

- **Relation Networks**: Applied the concept of object-object relation modelling for medical imaging.
- **ModiScript**: A Turing complete esoteric programming language, based on Indian Prime Minister Modi's anecdotes.
- **Object Tracking Framework**: Built a complete end to end, deep learning based detector-tracker pipeline.
- **Samuha**: A python library of not so common, but powerful clustering algorithms

SKILLS

- **Languages & frameworks**: Python, C++, Pytorch, Tensorflow, Django.
- **Courses**: Machine Learning, Computer vision, Data Structures & Algorithms