Sreenivas Venkobarao

Mobile: 413-522-3672
sreenivasv@cs.umass.edu
27 Hadley Rd, Sunderland, MA - 01375
linkedin.com/in/sreenivasvrao | github.com/sreenivasvrao

Education

- **University of Massachusetts, Amherst** — Amherst, MA
  Master of Science in Computer Science, GPA: 3.90/4.00 — *Sep. 2017 – Jun. 2019*
  - **Courses**: Computer Vision, Neural Networks, Artificial Intelligence, Introduction to Simulation
- **SSN College of Engineering, Anna University** — Chennai, India
  Bachelor of Engineering in Electronics and Communication Engineering — *Jul. 2013 – Apr. 2017*
  - **Courses**: Digital Image Processing, Computer Architecture, VLSI design, Microprocessors and Microcontrollers

Skills

- **Languages:** Python, MATLAB, Java • **Frameworks:** Tensorflow, OpenCV, Scikit-Learn, Keras
- **Software:** Git, Heroku • **Hardware:** Arduino

Work Experience

- **Computer Vision Intern** — Chennai, India
  e-Farmerce.com - Agricultural Analytics Platform — *Jul 2017 - Aug 2017*
  - Built a prototype system for identifying coconut farms from Satellite imagery. Implemented a system to extract images, label them manually, and train Deep Learning models on the data. Gained exposure to Ruby, and Python Deep Learning frameworks. Achieved 89% accuracy in predicting coconut farms.
- **Computer Vision Intern** — New Delhi, India
  Indria Labs (now Attentive.ai) — *Jun 2016 - Jul 2016*
  - Explored different methods for abandoned object recognition from CCTV surveillance footage. Built a dataset for luggage detection to train different Machine Learning algorithms. Gained exposure to Convolutional Neural Networks (CNNs), Online Learning, and Boosting algorithms.

Research Experience

- **Motion Segmentation using Camera Rotation Estimation**
  Course Project, UMass Amherst — *Jan 2018 -*
  - Currently working under Professor Erik Learned-Miller on devising methods to estimate camera rotation from a sequence of images, and investigate improvements in motion segmentation.
- **Depth Estimation from a Single Image**
  Course Project, UMass Amherst — *Oct 2017 - Dec 2017*
  - Investigated supervised and unsupervised algorithms to estimate the depth of a 3D scene from a single image. Devised novel loss-functions, and evaluated performance of different CNN architectures on various datasets.
- **Human Action Recognition from Videos**
  Undergrad Project, SSN College of Engineering, Chennai — *Dec 2016 - April 2017*
  - Worked under Dr. N. Venkateswaran, on identifying actions from videos, using CNN architectures. Designed a novel feature descriptor leveraging CNNs and classical Computer Vision approaches, and inspected performance. Gained exposure to video analysis, and popular frameworks like OpenCV, and Keras.

Projects

- **RiskyClickerBot**: Python based content moderation system for Reddit, to detect harmful images and videos.
- **Rubik's Cube Solver**: Python program to generate optimal solutions given photos of the Rubik's cube.