Mandar Deshpande

mandar6@ucla.edu
+1-9165138518

mandroid6.github.io
github.com/mandroid6
Python, Shell, Matlab, JavaScript

Education

- **University of California, Los Angeles** — Los Angeles, CA
  Masters of Science in Electrical and Computer Engineering — September 2019 - Exp. June 2021
  Focus Area: Machine learning and computer vision
- **Visvesvaraya National Institute of Technology** — Nagpur, India
  Bachelor of Technology in Electrical and Electronics; CGPA:8.73/10 — August 2013 - May 2017

Experience

- **Visual Machines Group (UCLA)** — Los Angeles, CA
  Graduate Researcher — October 2019 - Present
  - Investigating tumor cell detection and localization on CT scans using deep learning.
  - Implementing Mask Region based Convolutional Network (Mask-RCNN) in **Python**.
- **Citi** — Pune, India
  Machine Learning Engineer — July 2017 - June 2019
  - Designed OCR pipeline using deep learning and computer vision on text images in **Python** and **JavaScript**.
  - Reduced man-hours by 40% by utilizing NLP for parsing financial documents and information extraction.
- **Google Summer of Code - Mentor** — Pune, India
  TensorFlow — March 2019 - August 2019
  - Mentored the development of Random Network Distillation(RND), a bonus-based reinforcement learning algorithm.
  - Verified RND in MountainCar-v2, a hard-exploration environment. Used **Python** and **TensorFlow**.

  Gensim — May 2018 - August 2018
  - Guided the neural networks for similarity learning research in Gensim, a topic modelling library for **Python**.
  - Benchmarked map score of 0.6463 using MatchPyramid on WikiQA test set.

  Scilab — May 2018 - August 2018
  - Mentored the development of Scilab native ML toolbox and Cloud integrated ML toolbox in **Scilab** and **Python**.
- **Google Summer of Code - Student Developer** — Nagpur, India
  Scilab — May 2017 - August 2017
  - Integrated Jupyter with Scilab which allowed remote execution of model training in **Python** over network.

Selected Projects

- **Pixelwise Image Completion**: Developed a flavor of Residual Networks in **TensorFlow** for image in-painting on medical imaging in collaboration with IVPL Lab at Northwestern University.
- **Object Detection and Localization using SSD**: **PyTorch** implementation of Single Shot Detectors for YOLO and Multi-Box SSD.
- **Research Thesis: Meta-heuristic Algorithms for Fault Location Estimation**: Researched nature based algorithms using **Matlab** and **Simulink** to estimate fault location on transmission lines with 93% accuracy.

Leadership and Awards

- **Represented Scilab at Google Mentor Summit 2018** at Sunnyvale, for contributing the ML toolbox.
- Handpicked as one of the **45 students nationwide** to attend a management seminar at **SP Jain, Singapore.**
- Awarded **Amul Vidya Bhushan** for academic excellence in 12^{th} grade for achieving top 1%ile score across India.
- Offered **Research Scholarship** by the **Government of India** to pursue a career in Pure Sciences after 12^{th} grade.

Personal Interests

- **Music**: Playing Guitar and Tabla
- **Reading**: I have read over 150 books
- **Art**: 3D Modelling in Blender and creating digital artwork
- **Editing**: Photo and Video Editing (Personal channel)