Sairam Tabibu

5021 Brooklyn Avenue NE, #34, Seattle, WA - 98105

Summary of Qualifications

Software and Languages: Python, C++, C, R, Matlab, Latex

Embedded Platforms: Raspberry Pi, Arduino

Packages and Framework: Pytorch, Keras, Tensorflow, Numpy, Scikit-learn, OpenCV, MatConvnet

Certifications: Deeplearning.ai, Data Structures and Algorithms by Udacity

Interests: Computer Vision, Machine Learning, Deep Learning

EDUCATION

University of Washington, Seattle — UW College of Engineering, Seattle, WA

Master of Science in Electrical and Computer Engineering

Sept.. 2019 – Mar. 2021 (expected)

Selected coursework - Intro to Artificial Intelligence for mobile robots, Machine Vision, Machine Learning

Indian Institute of Technology(BHU), Varanasi, Varanasi, India

Bachelors of Technology in Electronics Engineering

Jul. 2013 – May. 2017

WORK EXPERIENCE

Great Learning, Bangalore, India

Mentor, Deep Learning Certificate Program

Nov. 2018 - May. 2019

• Mentoring working professionals and grading of Computer vision and Deep learning assignments in Keras and OpenCV.

IIIT, Hyderabad, Hyderabad, India

Research Fellow Nov. 2017 – Mar. 2019

- Worked on Histopahological Analysis of Kidney Carcinoma images to detect Cancer and its sub types and predicting the survival outcome using Deep Learning. research paper
- Built a Directed Acyclic graph based SVM model to deal with Data Imbalance.
- o Developed a survival prediction sys. using a COX Regression model trained on the features extracted from the Deep Net.

NTU, Singapore, Singapore

Research Intern

May. 2016 – Jul. 2016

- Worked on Detecting and tracking ships, boats, frigates using IR cameras along the Singapore coastline with every possible variation in orientation, shape, distance and surrounding effects. Report
- Implemented Selective search method (Method to generate object locations based on location, shape, color) in Matlab to get probable Bounding boxes.
- Used VGG nets using the MatConvnet toolkit to extract features and SVM for classification.

Changwon National University, South Korea, Changwon, South Korea

Research Intern

May. 2015 – Jul. 2015

- Worked on Improving and implementation of Real time face recognition algorithm on Embedded systems such as Raspberry Pi to be deployed as a low cost product. presentation
- Used OpenCV tools to extract Local derivative patterns from face and tested for various transforms such as DCT etc. to bring Illumination invariance.

RESEARCH PROJECTS

Hand gesture Recognition on Indian Sign language

Guide: Dr. Kishor Sarwadekar, Assistant Professor, IIT BHU

Dec. 2016 - May. 2017

- Implemented a hand segmentation algorithm based on skin color.
- o Implemented a Neural Network to recognise the Hand Gesture.

Lexical and visual analysis of social media posts

Guide: Dr. Erik Cambria

Jan. 2017 - Apr. 2017

- Project involved understanding the sentiment that a person elicits on different posts present on different social media sites.
- Proposed a method to extract hand crafted features (both verbal and visual features) and used Logistic Regression and Random forest for classification. research paper

Multimodal analysis for deception detection

Guide: Dr. Erik Cambria

Sep. 2016 - Dec. 2016

- Proposed a data-driven method for automatic deception detection in real-life trial data using visual and verbal cues.
- Used OpenFace toolkit to extract the visual cues and Opensmile tooklit to extract verbal cues.
- Used SVM on top of these features for classification. research paper