Sairam Tabibu

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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.
- 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.
- 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 toolkit to extract verbal cues.
- Used SVM on top of these features for classification. research paper