ROHAN VARDHAN

Orlando, FL - 32826 | 407-773-6536 | rohanvardhan@knights.ucf.edu | www.linkedin.com/in/rohanvardhan

EDUCATION

UNIVERSITY OF CENTRAL FLORIDA, Orlando FL - Master of Science in Computer Engineering (Expected graduation in May 2018) - 4.0/4.0 GPA

SKILLS

Programming Languages - Python, C++, MATLAB | **Libraries** - Sci-kit learn, Tensor Flow, Keras

PROJECTS

MACHINE LEARNING IMPLEMENTATION OF CAMP-LINEAR ALGORITHM *Jan'17 - May'17*

- Accomplished CAMP Linear algorithm to generate alerts
- Handled behavioral data from 800 scenarios of 100 cars to successfully train ML classifiers
- Increased warning range prediction accuracy by 12% as compared to traditional kinematic analysis for ground truth as well as lossy data

DEFENSE AGAINST DATA-DRIVEN ATTACKS ON BLACK-BOX NEURAL NETWORKS *Jan'17 - May'17*

- Implemented a substitute DNN to attack remotely hosted black-box classifier using adversarial examples crafted using MNIST dataset, Tensor Flow, Keras
- Generalized the substitute classifier to successfully attack logistic regression based classifiers and optimized it for 84% mis-classification accuracy

RECEIPT IDENTIFICATION USING MACHINE LEARNING *March'17 - April'17*

- Distinguished Walmart and non-Walmart receipts using OpenCV and Python
- Identified more than 6000 receipt images with an accuracy of 70%

EMOTION RECOGNITION IN SPEECH USING NEURAL NETWORKS *Jan'16 - April'16*

- Pioneered a speaker independent system to classify emotions by extracting prosodic features and cepstral features like MFCC using MATLAB and classify emotions like happiness, neutral, sadness, anger from speech using Python
- Worked on a dataset of 1000 speech samples to achieve a classification accuracy of 92%

EXPERIENCE

UNIVERSITY OF CENTRAL FLORIDA, CREOL, Orlando, FL - *Graduate Research Assistant May'17 - Present*

- Developed and deployed GUI based software for laser splicing machine used in research of nonlinear and quantum optics, fiber optics
- Utilized Python for integrating DLL to enhance the functionality of the splicing machine

UNIVERSITY OF CENTRAL FLORIDA, CRCV, Orlando, FL - *Graduate Assistant Sept'16 - Nov'16*

- Worked in Python and MATLAB to train a dataset of 15000 images to implement a system of image annotation

ACHIEVEMENTS

- Secured a rank of 142 out of 2246 in Kaggle's House Price Prediction Challenge