# ROHAN VARDHAN

rohanvardhan@knights.ucf.edu

407-773-6536 https://rohanvardhan.github.io

#### **EXPERIENCE**

#### **Graduate Research Assistant**

# CREOL, University of Central Florida, FL

May 2017 - Present

- Developed generative models in Python and Keras (TensorFlow) to restore the quality of image in image transmission experiments
- Designed machine learning models to reduce the OSNR in SDNs and improve the performance
- Automated the tapering and splicing process by developing software in Python
- Reduced overhead time by 40% over the time required to achieve the process manually
- Developed and delivered cross-platform training modules in Python

### **Visiting Research Assistant**

## Nokia Bell Labs, NJ

June 2017 - July 2017

- Created deep learning models using Python and Keras (TensorFlow) to improve the quality of mammograms and dental X-rays; Accepted and recognized by Dr. Nicolas Fontaine
- Assisted Dr. Nicolas Fontaine in calibration of LCoS-SLM using Python
- Delivered talk on 'Overview of Machine Learning' at Holmdel location

#### **Graduate Research Assistant**

## CRCV, University of Central Florida, FL

Sept. 2016 - Nov. 2016

- Handled automatic image captioning project for Dr. Boqing Gong
- Led a team of 4 to successfully train and test more than 60000 images using Python and MATLAB

#### **EDUCATION**

# Orlando, FL

### **University of Central Florida**

July 2016 – May 2018

- Master of Science in Computer Engineering, May 2018 (Expected)
- · Relevant Coursework: Data Mining Methodology, Independent Study, Computer Vision, Random Processes
- MOOC: Machine Learning (Coursera), Machine Learning A-Z (Udemy), Data Science A-Z (Udemy), Scala and Spark for Big Data and Machine Learning, Deep Learning specialization (Coursera), Python for Data Structures and Algorithms (Udemy)

#### India

#### **National Institute of Technology, Warangal**

July 2012 - May 2016

• Bachelor of Science in Electronics and Communication Engineering

#### **RELEVANT PROJECTS**

- Talent Ledger (2017). Created a resume classifier using Google Cloud Natural Language API and Ethereum blockchain; Designed a web app using Angular and NodeJS
- House Price Prediction (2016). Employed ensemble Lasso regularization and XGBoost to predict house prices using Python; Secured rank 142 out of 2249 (top 7%) on the Kaggle leaderboard
- Forward Collision Warning (FCW) using Machine Learning (2017). Designed a system using decision trees to generate alerts for cars within warning range; Improved the performance by 15% over the traditional CAMP Linear algorithm

# SKILLS

Programming Languages: Python (NumPy, Pandas, Matplotlib, Plotly), SQL, C++, MATLAB, R

Machine Learning Libraries: Scikit learn, TensorFlow, Keras

**Data Visualization**: Tableau, MicroStrategy **Machine Learning Software**: Gretl, SAS

#### **ACHIEVEMENTS**

- Secured 1<sup>st</sup> place in Royal Bank of Canada-Microsoft Hackathon (2017) Created a profit-based recommendation model to trade cryptocurrencies using Facebook Prophet and Plotly; Developed a web app using Angular and NodeJS, Deployed the app on Microsoft Azure
- Secured 4<sup>th</sup> place in Orlando Smartest City Hackathon (2017) Created a forecasting model for variable toll prices to maintain traffic load balance using Python and MicroStrategy