Github: krohitm
LinkedIn: krohitm

KUMAR ROHIT MALHOTRA

(352) 888-1332
krohitm@gmail.com

EXPERIENCE

Research Student — **intelligent Health lab University of Florida** — **May 2017-Present**

- **Research Area**: Activity recognition of ICU patients via Real-time 2D Pose estimation using part affinity fields
- **Advisor**: Dr. Parisa Rashidi

Software Engineer — **TEKSystems** — **Mar 2016 - July 2016**

- Designed data warehouse for Fixed Assets ETL module.
- Developed Fixed Assets ETL module and OBIEE reports, along with fixing around 90 bugs and defects in the existing code in a span of 2 months.

Associate Software Engineer — **TEKSystems** — **June 2014 – Feb 2016**

- Developed Trade and Business Planning, and Finance ETL modules.
- Reduced ETL flow time of various modules from 21 hours to less than 4 hours by merging the modules.

EDUCATION

Gainesville, FL — **University of Florida** — **Fall 2016 – May 2018(Expected)**

- M.S. in Computer Science. GPA: 3.5

Chandigarh, India — **Chandigarh Engineering College** — **Fall 2010 – Spring 2014**

- B. Tech. in Computer Science and Engineering

KEY PROJECTS

- **Speech Recognition Engine** (2017). Developed an end-to-end grapheme based speech recognition engine using deep convolutional neural networks with early fusion, completely from scratch. *Python*
- **Cancer Prediction and Classification** (2016). Predicted and classified cancer using gene expression; improved accuracy by 12% by reducing features from 54,000 to less than 500 by feature selection. *Python, scikit-learn*
- **Identification of handwritten digits** (2016). Developed a 95% accurate neural network to identify handwritten digits, with training time decreased by 50% using down sampling and early stopping. *Matlab*.
- **Facial Recognition and Soft Biometrics** (2016). Developed a facial recognition system using Eigen faces, and improved accuracy from 76% to 82% by experimenting with different number of principal components and ignoring high variance components. *Matlab*
- **Interference Cancelling via Adaptive Filtering** (2016). Developed an adaptive FIR filter for noise cancellation in a dual-mic system. Matlab
- **Recogneyes** (Swamp hacks 2017): App to draw sketches by tracking hand gestures via webcam, identify the sketch and then find an actual image. *Python, OpenCV, Clarifai API, Google's Custom Search API*

ADDITIONAL EXPERIENCE

- **Vice President at University of Florida Artificial Intelligence Club (**Feb 2016 - Present**)**: Gave a talk on convolutional neural networks and their application in image recognition using Tensorflow.
- **Intel & MobileODT Cervical Cancer Screening** (Kaggle 2017): Developed an image classification model to recognize the type of cervical cancer from patients' images dataset. Placed 121 out of 848 competitors (top 15%) on the leaderboard. *Python, Keras*

Languages and Technologies

- Python, Matlab, SQL, Latex, Git, Informatica Power Center, OBIEE, DAC, MS Office
- Libraries: Scikit-learn, Numpy, Keras, Tensorflow, Caffe, OpenCV
- Working Knowledge: C++, C, Java, R, Ruby, Rails, HTML
- OS: Ubuntu, Mac OS, Windows
- Databases: Oracle, MySQL