# **Pranoy Kovuri**

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#### **EDUCATION**

**Texas A&M University,** College Station, TX, *MS* Computer Science, **GPA: 4/4 NIT Warangal,** India, B.Tech. Electronics and Communication, **GPA: 3.8/4. Udacity,** Deep Learning Nanodegree Foundation

Aug 17-Current Jun 11-May 15 Jan 17-Jul 17

## **TECHNICAL SKILLS**

Languages: Python, C++, C, Matlab, Java, Assembly, Markdown, Ruby, Javascript

Libraries: Tensorflow, Pytorch, Pandas, Numpy, SciKit, Keras, OpenCV

Tools: Jupyter, Pycharm, Perforce, Git, Code Collaborator, CodeBlocks, Visual Studio

#### PROFESSIONAL EXPERIENCE

Artificial Intelligence Research Intern, Philips Research HealthTech, Cambridge

May 18-Current

- created a new dataset manually annotating Radiology Reports measuring inter-annotator agree on various degrees
- Developed and Tested Baseline models for NER and Relation Extraction using CRF, LSTM, LSTM-CRF
- Currently working on joint modelling developing End-to-End Models based on Tree LSTM for publishing in NAACL 2019

## Research Assistant, NLU and Deep Learning, Texas A&M University

Sept 17-Current

- O Developing unsupervised and semi-supervised neural architectures for joint relation extraction and NER targeting NAACL 2019
- o Modelled and Tested Sequential Architectures for Biomedical and Sensor Time Series Data
- o Improved performance of XGBoost models on ICU readmission prediction by incorporating text based features from clinical notes

## Teaching Assistant, Sr Capstone Design, Texas A&M University

Jan 18-May 18

 $\circ \qquad \text{Responsible for supervising the various projects Undergraduates design and develop} \\$ 

Student Assistant, Natural Language Processing, Texas A&M University

Sept 17-Dec 17

• Software Developer, Qualcomm(India)

Jun 15-Jun 17

- o Implemented real time features in various Wi-Fi modules and solved customer critical issues to develop requirements for OEMs. Provided software support OEM's product launches while in China
- Software Internship, Qualcomm(India)

May 14- Jul 14

o Enhanced and developed software solution for Samsung Group Play application

# **PROJECTS**

- The SmartChatBot
  - o Developing a Q/A system which takes documents as inputs and is capable of answering questions about that document.
  - o Worked on End-to-End Memory Networks and Dynamic Memory Network based model using LSTMs and GRUs
- Social Networking Service Website for CSE Department
  - o Developed a website for the department of Computer Science and Engineering at Texas A&M University, for enhancing the communication between the student organizations and the students using Ruby on Rails
- Implemented Classic Machine Learning Models using only Numpy
  - o Implemented Naive Bayes classifier and KNN classifier for digit recognition.
  - o Implemented Logistic Regression, Locally Weighted Logistic Regression and Perceptron algorithm for Binary classification.
  - o Implemented Gaussian Mixture Models for clustering
- Sentiment Analysis on IMDb movie review database
  - Developed and experimented different neural network architectures for Sentiment Classification for movie reviews, categorizing them as positive and negative sentiment based on the movie review
- Anti-Forensics of JPEG Image Compression
  - Designed and developed Anti-forensic techniques in Image Compression, to avoid digital footprints of techniques such as DCT and DWT on JPEG images.
  - o Designed neural networks for estimating primary quantization matrix in double compressed images
- Helping Heart Failure Patients survive MIT Project
  - o Designing a Solr based search system for selecting Echo Cardiogram Notes of Patients for CHF with Sepsis
  - Creating a pipeline for selecting Echocardiogram notes for Congestive Heart Failure patients and classifying the note for various degrees of Fluid resuscitation

# **KEY COURSES**

- Academic: Machine Learning, Artificial Intelligence, Software Engineering, Natural Language Processing, Algorithms, Data Visualization, Maths of Deep Learning, Neural Networks
- Software: Problem Solving and Computer Programming in C++, Data Structures, Object Oriented Programming
- MOOCs: Algorithms Specialization Coursera Stanford, Deep Learning Nano Degree Udacity, Machine Learning Coursera Stanford