# Venkatesh Ramanathan

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### Data Scientist & Business Intelligence Analyst

😯 1002 Greek Row Dr, Apt - 318, Arlington, TX

## **Professional Experience**

Graduate Teaching Assistant | ISOM, UTA May 2017 - Present

Courses: INSY 3300 / INSY 5392 Introduction to Programming (Python) Instructors: Dr Ramakrishna Dantu

- Tutor students on Python programming and Object-Oriented programming
- Participate with instructors in formulating quiz, assignments and tests for 12 graduate and 32 undergraduate students and assisted the instructors in evaluating the students

## Selected Projects

### Social Network Analytics on Amazon Reviews

- Web scrapped product reviews of Asus C201 Chromebook and the collected reviews were tokenized and subjected to pre-processing
- Used Google's Word2Vec to generate word pairs with similar semantic meaning and used NetDraw to visualise the network
- Performed Social Network analysis techniques such as N-Cliques, Betweenness centrality, Eigen Vector centrality, Component Analysis & Density visualization to identify and classify the types and levels of issues with product

#### Pokémon Go Analytics Using ML & DL March – May 2017

- Extracted values from Android & IOS Pokemon Go webpages using Beautiful Soup and created Pandas dataframe, JSON, CSV & Excel files
- Explored the data created scatter matrix to identify pairs with high correlations and calculated Pearson's coefficient and built time series using matplotlib
- Built Machine Learning models and predicted Android & IOS ratings for Nov  $1^{\text{st}}$ 11:50 pm and also performed Deep Learning using Tensorflow on the Android / IOS webpages

#### Social Media Analytics Using Text Mining Feb - April 2017

- Collected 50k tweets from 5 states using twitter streaming API Twython and performed data analysis to gather insights
- Conducted sentiment analysis using TextBlob to calculate the polarity and subjectivity scores for each tweet and created histograms using matplotlib
- Created a Word Cloud from the collected tweets and conducted Topic Modelling using Non-negative Matrix Factorization (NMF) & Latent Dirichlet Allocation (LDA)

#### Android App Assisting Blind Social Interaction Jan – May 2016

- Designed the user experience & developed an android application that assists the blind with their social interaction. Created face recognition, emotion detection & text to speech part of the application
- Conducted user studies, surveys, data analysis, usability tests, A/B tests and created the application prototype

#### **Dialysis Facility Mortality Rate Prediction** Aug – Dec 2015

- Performed data analysis on a dialysis facility dataset and built multiple, logistic and linear models
- Performed re-sampling methods such as training, validation set, LOOCV and 10 fold CV and carried out model selection techniques such as forward, backward, ridge and lasso

#### Interface & Interaction Design for a Kiosk Oct - Dec 2015

- Performed user and task analysis on Record Store Kiosks to understand kiosk design and gathered requirements by creating user personas
- Designed interactions and interfaces for the kiosk based on data analysis, graphic design principles and memory principles and created prototypes of the design
  - Presented an one minute infographic of the improvised design

### Education

M.S. Information Systems May 2018

University Of Texas Arlington

**B.**Tech Information Technology May 2015

Sri Krishna College Of Engineering Tamilnadu, India

### Skills

User Research Product / Design

Experience, Interaction Personas **User Stories** Usability, A/B Testing Prototyping, Wireframes Interviews Road Maps, Affinity Diagrams Surveys

Design Think, Requirement Data Analysis, Viz

Tools **Technical Methods** C. C++ Balsamiq, Invision Machine Learning SAS, Tableau Python, R Deep Learning **UCINET** HTML5, CSS3 TensorFlow WordPress, SAP MySQL, .NET Text Mining Ms Word, Excel Android Studio SNA

### Relevant Courses

Data Science using Python

Data Analytics using R

Advanced Statistical Analysis

Social Network Analysis using Python

Data Warehousing & Business Intelligence

Data Mining

**Business & Economic Forecasting** 

Human - Centered Computing

Human - Computer Interaction

Project Management

## Leadership

IT Department Committee | Student Leader

2012 - 2015

IT Department Technical Festival | Program Head

2014