# Sibi Rajendran

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## **EDUCATION**

## **TEXAS A&M UNIVERSITY**

MS IN COMPUTER SCIENCE

Expected: May 2017 College Station, TX

## NIT, TIRUCHIRAPPALLI

**B.Tech in Computer Science** 

August 2015 Tiruchirappalli, India

## COURSEWORK

## **GRADUATE**

Machine Learning Artificial Intelligence Software Engineering Data Analysis using R Information Storage and Retrieval Analysis of Algorithms

## **UNDERGRADUATE**

Data Structures and Algorithms Artificial Intelligence + Practicum Computer Graphics Web Technology Operations Research Computer Networks

## **CERTIFICATIONS**

SAS:

Certified BASE SAS Programmer Data Science:

Springboard Data Science Intensive certification with Capstone Project

# SKILLS

## **PROGRAMMING**

Proficient:

- Python R SAS Tableau
- SQL C++ Excel Bash

Intermediate:

- Ruby Ruby on Rails
- CSS PHP JavaScript Java

#### **OPERATING SYSTEMS**

Linux - Ubuntu, Fedora • Windows

# SOCIETIES

President - Balls by Picasso Literary and Debating Society (NIT-T)

Editor-in-Chief of 'feeds' NIT-T's official monthly magazine

Classical Violinist - SPIC MACAY

## **PROJECTS**

## PREDICTING RESULTS IN SOCCER LEAGUES • DATA SCIENCE

September 2016 - December 2016

- Discovered scoring trends in European Soccer Leagues and compared effects of home advantage across leagues.
- Forecast the outcomes of upcoming matches with a Poisson model that incorporates the patterns previously found.
- Formulated a multiclass (win, draw, loss) classification problem final model has a mean accuracy of 63% (random benchmark model has a 33% accuracy).

#### PREDICTING WEST NILE VIRUS IN CHICAGO • MACHINE LEARNING

August 2016 - December 2016

- Analyzed available data about mosquito traps and weather in Chicago to accurately predict the presence of West Nile Virus.
- The final Random Forest model with an AUC of 0.75 will help cut down costs by more than 25% for the public health department.

## **DRUG REPOSITIONING USING R • DATA ANALYSIS**

January 2016 – May 2016

- Developed and implemented models in R to compare drug and disease signatures in order to find new applications for existing and approved drugs.
- Curated a set of existing diseases and with their corresponding control and disease cases from ArrayExpress in order to perform this big data analysis.

## MINI SEARCH ENGINE - IMDB • INFORMATION RETRIEVAL

January 2016 - May 2016

- Crawled data about 100.000+ movies from IMDb (Internet Movie Database).
- Summarized each review and analyzed each one's sentiment.
- Indexed these documents in SoIR for quicker retrieval of short reviews along with a positive, negative or neutral score.

#### **COURSE ASSIGNMENT SYSTEM • SOFTWARE ENGINEERING**

August 2015 – December 2015

- Developed a web application using Ruby on Rails to get preferences from all faculty members regarding the days, time slots and classrooms in which they would like to teach helped the department coordinator in assigning rooms and timings to match their preferences without generating conflicts.
- This app is being used by the department coordinator from Spring, 2016.

## **EXPERIENCE**

## **SAMSUNG R&D INSTITUTE, INDIA • STUDENT INTERN**

May 2014 - July 2014 | Bangalore, India

- Worked on IMS (IP Multimedia Subsystem) commercialization.
- Designed and implemented a new rate control algorithm for video telephony in the IMS Stack implemented in all Samsung phones.

## RESEARCH

## **DISTRIBUTED SYSTEMS - PUBLICATION • RESEARCH ASSISTANT**

January 2014 - August 2014 | Tiruchirappalli, India

- Analyzed existing Load Balancing algorithms for Task Assignment in Distributed Systems.
- Implemented a new optimized greedy algorithm C++ and OpenMPI and presented it in IJRCET conference.