# SUDHANSU SHEKHAR SINGH

**♀** 3001-B, Kings Ct. NC, 27606

# **EDUCATION**

North Carolina State University

MS Computer Science 2017

Courses: Operating System Principles, DBMS, Analysis of Algorithms, Algorithms for Data Guided Business Intelligence, Foundation Of Data

Science, Data Intensive Computing, Artificial Intelligence

GPA: 3.5/4.0

BIT Sindri. India

B.Tech. Information Technology 2011

GPA: 8.5/10.0

## **SKILLS**

**BIG DATA** 

LANGUAGES
Java, Python, Swift, Objective C, SQL, JavaScript
Google Firebase, Oracle-11g, MongoDB, MySQL

PLATFORMS Mac-OSX, Ubuntu, Windows
MOBILE DEV iOS, Windows Phone, React-Native

**TOOLS** XCode, Git, SVN, Eclipse, Espresso, Radar, Visual Studio,

R-Studio

FRAMEWORK Cocoa, Cocoa-Touch, Core Data, .Net, Node.js

Apache Spark, Recommendation System, MLlib, Kafka

# **EMPLOYMENT**

### NORTH CAROLINA STATE UNIVERSITY

Web Programming Assistant

• Incorporated Data Visualization using Google Charts API along with HTML, PHP and MySQL database for several university department websites.

INFOSYS LTD. 2011 to 2015

#### Senior System Engineer

• Designed and programmed an n-tier Java EE based Web Application for internal bus services using JSP, JPA and Oracle DB.

- Implemented multiple modules in COCOA and ISTCF framework for Pricing and Forecasting application in Supply Chain Integration (SCI) domain with Apple IS&T.
- Automated the pricing data and formula ingestion in application using LibXL framework and data flow from different sources like AOS (Apple online Store), upstream/downstream, using UNIX Autosys jobs.
- Designed and programmed Error framework to handle exceptions/errors in multiple application in Supply Chain domain that helped users to simultaneously create Espresso tickets.

## **MOBILE APPS**

#### MOVIE TRAILERS REVIEW APP(IOS + ANDROID)

· (Ongoing)

Raleigh, NC

A react-native cross platform app that uses Google Firebase and provides services to users, to watch, share and review new movie trailers.

FREE & FOR SALE APP(IOS) (Ongoing)

An iOS app developed in Swift that uses Facebook graph API data and Google Firebase to provides services to users for buying and selling new/used stuffs in nearby places.

# RESKUEME(WINDOWS)

A safety application for women, that can raise alarm by sending texts (SMS) to close contacts and do Facebook check-in of current location when a user senses some danger.

# **COURSE PROJECTS**

### **BUSINESS RECOMMENDATION SYSTEM**

Based on Yelp data-set for user reviews, implemented Business recommendation on topics, a Business Owner can improve in their restaurant, by normalizing raw user reviews data, using Python's NLTK and LDA algorithm for topic modelling.

### COMMUNITY DETECTION IN ATTRIBUTED GRAPH

Incorporated an algorithm to find market segments in social network data of Facebook users. The algorithm detected communities in attributed graph data based on the structural, demographic (age, sex, ethnicity, education) and attribute similarities using Python's I Graph module.

# MUSIC RECOMMENDATION SYSTEM

Implemented an algorithm to recommend new musical artists to user based on their listening history using Altering Least Square Algorithm(ALS) for Collaborative Filtering, on Audioscrobbler data of users-artists and the play counts.

#### TWITTER SENTIMENT ANALYTICS

Performed Sentiment Analysis over live-streaming tweets from Twitter using Twitter API and Apache Spark and streaming API, Kafka.

#### **NETWORK FILE TRANSFER SYTEM**

Programmed a reliable transport mechanism for file transfer, by dividing data into segments, using checksum and buffer management techniques using Python.

# MULTITHREADING AND PAGE REPLACEMENT IN XINU OS

Implemented Process Scheduling, Demand Paging (Page replacement: FIFO, LRU) and Readers/Writer Locks semantics using semaphores in XINU operating system using C language.

# LIBRARY DATABASE SYSTEM

Developed Library Database System in Oracle 12g using PL/SQL and Java-JDBC connections to database.

### **ACTIVITIES**