# **PRANSHU SINHA**

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## **Education**

North Carolina State University, Raleigh, United States.

GPA - 3.77/4

Master's in Computer Science

**Expected May 2019** 

**Relevant Coursework:** Automated Learning and Data Analysis, Design and Analysis of Algorithms, Foundations of Data Science, Object Oriented Design and Development, Database Management Systems.

## Sardar Patel Institute of Technology, Mumbai University, India

<u>Bachelor of Engineering (B.E) Electronics & Telecommunication Engineering (Major)</u>

3.5/4 - May 2017

#### **Technical Skills**

• Languages : C/C++, JAVA, Python R • App Development : Android

DBMS Platforms : MySQL, PostgreSQL
 Big Data Platforms : ELK Stack, Tableau, Hadoop
 Web Designing : HTML, CSS, JS, Node.JS
 Hardware Language : Arduino, VHDL, MATLAB

# **Professional Experience**

# 1. Software Development Intern - Viewpointsystem Gmbh - Vienna, Austria

Jan 2017 to Feb 2017

 Developed Bench test environment for Eye Tracking Glasses to test the robustness and accuracy of the system using Arduino and Python. Debugged the existing Node.JS web interface and configured GStreamer for live video streaming.
 <u>Tech Stack: Python, Arduino, JAVA, Node.JS and C</u>

## 2. Software Development Intern - FarEye PVT. LTD. - New Delhi, India

June 2016 to July 2016

• Customer behavior analysis for logistics-based companies based on historic patterns using Elasticsearch. Unsupervised Machine Learning Techniques were used for data cleaning and to identify historic patterns for different regions and business models. Tech Stack: JAVA, Elasticsearch, Kibana, Spring MVC, SQL and Azure Cloud.

## 3. Software Development Intern - FarEye PVT. LTD. - New Delhi, India

June 2015 to July 2015

• Integrated Elasticsearch and Kibana as Analytics engine on the current platform using Extract, Transform, Load (ETL) methods with data transformations and Index mapping (feature property mapping). 9.1 Billion data was inserted into Elasticsearch. *Tech Stack: JAVA, Elasticsearch, Kibana, SQL and AWS*.

## 4. Software Development Intern - FarEye PVT. LTD. - New Delhi, India

Dec 2014 to Jan 2015

• Worked on the project "Data Mining and Integration using Heterogeneous Data Sources". Mined the data of all the localities and Pin-codes of India identified by India Post using MySQL and JAVA. <u>Tech Stack: Java, SQL and Spring JAVA.</u>

## **Academic Projects**

## 1. Peer Review Quality Assessment using Deep Learning Techniques – Independent Study Research Topic:

 Text Content Identification for Peer Review Feedback where each Feedback comprises of 7 features – Praise, Problem, Solution, Mitigation, Neutrality, Localization and Summary. The text content is identified using Deep Learning Techniques such as Convolutional Neural Network, Recurrent Neural Network and Feed Forward Neural Network. Further Research is going on implementing NLP techniques for feature extraction process. <u>Tech Stack: Python, R, TensorFlow.</u>

#### 2. Netflix Prize: User Rating Predictor using Neural Networks:

• Implemented a User rating predictor model using collaborative filtering approaches and blend of Recursive neural networks. The user rating model was trained on the Netflix Prize Dataset and stochastic gradient descent regression techniques were implemented to capture the baseline biases and temporal biases. <u>Tech Stack: Python, R, TensorFlow.</u>

#### 3. Latency Tolerant Cloud Telephony System:

• Cloud based small scale latency tolerant telephony system aimed at minimizing capital expenditure towards telephony hardware was designed using Asterisk PBX. Dynamic Jitter buffers were used to make the system tolerant towards latency. <u>Tech Stack: Asterisk PBX, Java, Android and SQL.</u>

#### 4. DHUN: Tune Recognition based Music App:

• The project was on the line of the App "Shazam" developed for Hindi Language, which involved Audio Fingerprinting for creating unique codes for every sound and used clustering and KNN to Identify and match the input sound to a song in the database. <u>Tech Stack: Android, JAVA and SQL.</u>

## 5. IOT based Pulse Monitoring System:

 Developed a Prototype of a wearable device which measured the pulse of the person and uploaded that data in the cloud for observing patient's data remotely. The pulsemeter also notified emergency contact in case of emergencies.
 <u>Tech Stack: JAVA, Python, SQL and Arduino.</u>

## **Co-curricular Activities**

- Secured 1st place in departmental Technical paper presentation competition for "Cloud Telephony System"
- Presented "IOT based Pulse monitoring System" project at 2016 International Symposium of Internet of Things, Mumbai.