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**LANGUAGES and TECHNOLOGIES**

- Python, Java, C++, R, HTML5, CSS3, Node.js
- SQL, Tableau, Excel, MongoDB, Hibernate, SQL Alchemy, Flask
- Jupyter Notebook, AWS, Docker, Eclipse, Git, Linux, Plotly
- Word2Vec, Keras, Tensorflow, NLTK, Scikit-Learn, Numpy, Scipy, Pandas, Pytest, Spark
- Surprise, Recommender Systems, Collaborative Filtering, Matrix Factorization
- Model View Controller (MVC), J2EE, Apache Tomcat, SOAP, JUnit, REST API

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**EMPLOYMENT**

**Student Assistant – Machine Learning with Big Data**      **San Jose State University**      Jan 2018 - Present

**Topics:** Data Preparation, Supervised Learning, Unsupervised Learning, Recommendation Systems

- Assisting the class to learn the concepts of Machine Learning Algorithms like Regression, Decision Tree and Random Forest.
- Evaluating performance of class and helping students to improve their skills in the domain.
- Supporting faculty to conduct administrative tasks to provide the best learning experience to students.

**Software Engineering Intern (NLP)**      **Ainuco, Inc.**      June 2017 - Aug 2017

**Technologies:** Python, NLTK, MySQL, NumPy, Pandas, Matplotlib

- Conducted numeric statistical evaluation to calculate similarity for **information retrieval** (IR). Improved the efficiency of the program using multiprocessing and multi-threading capabilities of python.
- Worked on **machine learning** models based on linear regression and logistic regression. Designed modules for **data crawling** and **data scraping** using python tools like Urllib2 and BeautifulSoup.

**Software Development Intern**      **SculptSoft Limited**      June 2015 - May 2016

**Technologies:** Java, Hibernate, Hadoop, Hive, Apache Tomcat, HTML/CSS, AJAX

- Created a responsive web application which helps to explore the real estate prices based on locations and types of properties.
- Used big data technologies like Hadoop, Hive, and Sqoop to load, transform and extract data from the SQL database.
- Developed the front-end using Bootstrap, HTML/CSS, and JavaScript as well as backend using **Hibernate framework**.
- Enforced **MVC** architecture, concepts of **OOP** and **Normalization** methodology for the development process.

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**EDUCATION**

**MS in Software Engineering**      **San Jose State University**      Aug 2016 - May 2018

- Graduate Coursework: Machine Learning, Large Scale Analytics, Business Intelligence, Enterprise Software Platforms, Software System Engineering, Enterprise Distributed Systems, Cloud Technologies, Virtualization Technologies.

**BE in Computer Engineering**      **Gujarat Technological University**      Aug 2012 - June 2016

- Undergraduate Coursework: **Data Structure and Algorithms**, Object Oriented Programming, Design and Analysis of Algorithms, Database Management Systems, Web Application Development, Computer Networks.

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**PROJECTS**

**Stock Market Analysis and Prediction**      May 2018

Developed a machine learning application to predict stock price using a Recurrent Neural Network (RNN) composed of Long Short-Term Memory (**LSTM**) units. Variations of LSTM algorithm were compared by training on multiple years' **time series** data of stocks and the best algorithm was selected to conduct further hyperparameter tuning. Accuracy of the prediction was improved by nearly 10% using Grid Search over the RNN.

**Yelp Restaurant Recommendation based on Review Intent**      Dec 2017

Worked on a huge data set of Yelp consisting of 4,70,000, reviews and 1,56,000 businesses. Performed **filtering, classification and sentiment analysis** on the influential reviews to map businesses with keywords. Suggested relevant restaurants with an average rating of 4 out of 5 from the user review and solved the cold start problem for the new user.

**Location Based Stream Listener and Sentiment Analyzer for Twitter**      March 2018

Built a python based personal project in which the module communicates with the Twitter Developer API in order to stream and view live tweets. The user can filter tweets based on topics and locations. It also provides a **Data Visualization** of comparison of sentiments of a series of topics over the same or a different set of locations. **Jupyter Notebook** and **Tweepy** were leveraged for this project.

**Visualization of Health Care Policy Analysis**      Dec 2016

Developed a dashboard to visualize the results of Insurance policy analysis in the USA during 2014-16. The analysis of policy was conducted over 3 years of data and for different parameters like age group, employment status, location based, etc.

**Trip Planner Web Application**      Dec 2016

Delivered a web application that plans a trip which consists of multiple places comparing the travel cost between Uber and Lyft. It leveraged Flask as web framework and SQLAlchemy as an **ORM** tool for interacting with data.

**Guess It – A Java-based Game**      Dec 2016

Developed a two-dimensional multiplayer educational game following **Agile S/W Development Methodology-SCRUM** and **Kanban**. Applied Object Oriented Programming(**OOP**) and **design patterns** like Decorator, Observer and Composite pattern in Java.