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EDUCATION

CANDIDATE FOR MASTER OF SCIENCE IN COMPUTER SCIENCE (GPA: 3.85/4.0)   Fall 2016 – Spring 2018 (Expected)
Illinois Institute of Technology- Chicago, Illinois

Courses: Machine learning, Advanced Database Organization, Data structures and Algorithms, Advanced Data Mining.

Languages/Tools: C, Java, SQL, Python, R, PHP, CSS, HTML, Scikit, Git, Linux.

BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING (GPA: 7.95/10.0)   2010- 2014
National Institute of Technology -Trichy, India

RESEARCH EXPERIENCE

Watching The Fed (*Topic Modeling | NLP | Web scraping | R | Python*)   Chicago (Fall 2017- Present)
Under Dr. Irina Matveeva, IIT Chicago

- Performed an unbiased examination of Federal Reserve meeting minutes using LDA and LSA methods.
- Implemented **Latent Semantic Analysis** (LSA) by using R to determine the influence of different policymakers on the monthly minutes of Federal Reserve meeting data.
- Implemented **Latent Dirichlet Allocation** (LDA) to analyze changing topics of Fed data over time (1993-2017).

ACADEMIC PROJECTS

Online Social Network Analysis (*Sentiment Analysis | Data Annotation | JSON | API*)   Chicago (Fall 2017)

- Explored the fundamentals of social graph theory and studied algorithms for analyzing online social networks through data obtained from Twitter using its API.
- Performed community detection on certain twitter accounts and developed a heuristic to identify whether the tweet is related to 'Data science' tweets using the SVM, supervised learning model .

Chicago Crime Prediction (*Supervised learning | Predictive Modeling | Python*)   Chicago (Spring 2017)

- Built a Decision tree classifier with an accuracy of **81.29** percent to predict the crime rate based on demographic and economic information of the locality obtained from the city of Chicago data portal.

Database for Online Grocery store (*SQL | PHP | CSS | HTML | GIT*)   Chicago (Fall 2016)

- Built an online grocery store application using a database backend to store information about products, availability of products in the stock, and customers of the store.
- Designed the ER model and used it to create a relational schema through **SQL** script on oracle database account.

PERSONAL PROJECTS

NewsOptimism *(Text-analysis | Lexicon based approach | NLP| AFINN | API | Python | Cron)*   Chicago (Fall 2017)

- Developed an application that collects articles from American news media websites and ranked those websites based on the net positivity of the words in the article.
- Automated the data collection process from news websites on periodic basis by running the script through Cron.
- Transformed more than **10GB** unstructured data into a csv formatted clean data through pandas library.

Fitbit application (*Prototype app | API | JSON | SQL | Python*)   Chicago (Fall 2017)

- Launched a prototype application that recommends Food to the Fitbit watch users based on the amount of calories burnt data obtained through **Fitbit API**. The data is converted from JSON and stored in **SQLite** database.
- Built a **sms based alert system** with top 5 food recommendations based on the target calorie burnt value.

Miscellaneous Projects   Chicago (Aug 2016 - Present)

- Published an Alexa skill, **Thirukurral**, on the Amazon developer community learned through AWS 2017 summit.
- Created an Image detection app called **Diagnozer_oo** to diagnosis the abnormalities of Patient activities and based on that provide insights as part of the two day ScarletHacks 2017 hackathon.
- Built an alert system that alerts based on the difference of stock prices scrapped from Yahoo finance.

PROFESSIONAL EXPERIENCE

Junior Design Engineer- Vaata Infra Limited   India (June 2014 - April 2015)

- Developed an efficient Optimization methodology for load planning and packaging Vertical axis wind turbine components that increased the shipping of total turbine modules from 6 to 10 per shipping container.
- Collaborated with the Construction Engineer and the Research and Development team manager, to deliver a fully constructed Concrete-Tower on time.