

# HAMEED UL HASSAN MOHAMMED

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## EDUCATION

**Texas A&M University**, College Station, TX **May 2019**  
*Master of Engineering* in Computer Engineering, GPA:3.7  
**Courses:** Data Science, Data Mining, Machine Learning, Reinforcement Learning, Analysis of Algorithms, Software Engineering.

## SKILLS

**IDE:** Spyder, R Studio, Anaconda, Eclipse, PEGA-PRPC.  
**Certification:** PEGA Certified System Architect.  
**Software Skills:** C., PYTHON, JAVA, UNIX, SQL, Numpy, Scikit Learn, Matplotlib, Jupyter Notebook, JSON.

## PROJECTS

**Detection of Devanagari characters in images through Machine Learning:** *Sep 2017 - Dec 2017*

- Implemented detection of Devanagari characters through classification (supervised learning) methodology.
- Experimented with various classifiers and tackled overfitting through K-fold cross validation.
- Increased the accuracy to 89.36% through boosting by Extra tree classifiers.

**Prediction of Consumer Characteristics through Smart Meter Data:** *Sep 2017 - Dec 2017*

- Performed exploratory data analysis through R studio.
- Predicted consumer characteristics through correlation and k-means clustering (Unsupervised learning).
- Performed Time series analysis and predicted average electricity consumption through SVR.

**Prediction of House Prices** *Jan 2018 – Feb 2018*

- Implemented data pre-processing techniques and predicted house prices using three methods (Random Forests, Regression Trees and Gradient Boosting Machine) and compared accuracy with root mean Square Error.
- Tools and Packages: Python,

**Sentiment Analysis of Reviews using different classifiers** *Mar 2018 – Apr 2018*

- Developed models and improving them to determine the sentiment of Reviews by building feature vectors from raw data (JSON) and achieved accuracy of 96%. Used Yelp Dataset for training the models.
- Subtasks: Import Data, Exploratory Data Analysis, Text Preprocessing, Vectorization, Cross Validation
- Classifiers used: K-Nearest Neighbors, Decision Tree, Support Vector Machine

## WORK EXPERIENCE

**Graduate Research Assistant, Public Policy Research Institute** *June 2018-Present*

- Assisting Dr. Dottie Carmichael in research on Smart defense of Indigent defendants.
- Migrating defendant data of Texas counties into local server and creating data models based on multiple parameters.
- Performing activities like cleaning, detecting anomalies, extracting and formatting relevant data through SQL scripting.
- Scraping websites to gather data, converting to JSON, cleaning and formatting data through regular expressions.

**Systems Engineer, Infosys Ltd., Pune, India.** *November 2015- August 2017*

- Assisted Principal Architect during requirement gathering phase and prepared MVP document for F-500 client.
- Created e-commerce application including UI, business and persistence logic through JSP, JAVA beans and Hibernate FW.
- Tested for all possible bugs and deployed through Apache Tomcat server.
- Learnt various aspects of SDLC and Agile methodology. Implemented user stories of the sprint and performed unit testing.
- Fixed bugs and code issues that arise in QA or Production environment, Optimized code for scalability and performance.

**Systems Engineer Intern, Infosys Ltd., Mysore, India.** *June 2015-October 2015*

- Underwent 1.5 months rigorous training in Python, RDBMS&SQL and Software Engineering.
- Implemented banking application on Python with all functionalities of a standard online banking portal.
- Integrated application with legacy PERL scripts for interaction with remote client servers and Database Management.
- Tested for possible corner cases and documented the project life cycle. Presented to management as case study.

## ACTIVITIES

- Active member of Texas A&M Data Analytics club. Attending workshops and enhancing my Data Analytics skills.
- Won state grant of \$30,000 for excellent academic record and to sponsor my education here at Texas A&M.
- Council Member, IEEE Students Chapter (2011-14) - increased students' membership by ~150%
- Head of Organizing Committee, Adsophos-2015 (college technical fest attended by 30,000 students).

**WORK AUTHORIZATION:** Eligible to intern in United States with Curricular Practical Training.