Masum Shah

1100 Howe Ave., Sacramento, CA 95825 | (916) 495-8173 | masummshah@gmail.com|
https://github.com/masumshah1234|https://www.linkedin.com/in/masum10/

EDUCATION

Sacramento, CA **California State University Sacramento** **Aug '18-Dec '20**

- Master of Science in Computer Science (GPA:3.3)

Nadiad, India **Dharmsinh Desai University** **July '13 – May '17**

- B.Tech in Information Technology (GPA : 7.1/10)

EXPERIENCE

Software Engineer Intern **Infosys Limited, India** **Feb '17 – June '17**

- Hands-on experience in HTML, CSS, JavaScript, AngularJS, jQuery, Object Oriented programing in Python, various Java EE technologies like Spring and Hibernate Spring Framework.
- Underwent **200+ hours** of training in all these technical topics and SLDC frameworks such as Agile, Scrum, Waterfall, prototyping and Spiral.
- Led a team of 5 members to implement a project of **App Use Case portal** in which admin of an application approve or reject a use-case uploaded by a user. HTML, CSS, Bootstrap, JavaScript, Java, MySQL, AngularJS, Spring and Hibernate framework were used for this project.

SKILLS

- **Programing Language:** **C, C++, Java, Python**
- **Database:** **Oracle, MySQL, PostgreSQL**
- **Web Development:** **HTML, CSS, XML, JavaScript**
- **Development Platform:** **Eclipse, NetBeans, Android-Studio, Arduino IDE, AWS, Docker, Git.**
- **Academic coursework:** **Distributed Systems, Artificial Intelligence, Operating Systems, Data Structures & Algorithms, Data Mining & Data Warehousing, Computer Forensics, Computer System Architecture, Software Requirements Analysis and Specifications.**

PROJECTS

Indoor Localization using LoRa, Raspberry Pi, Arduino and DHT sensor **(Ongoing Master's Project)**

- Data preprocessing, principal component analysis for feature extraction of 25 GBs of sensor data
- Used Naïve Bayes Probability theorem for detecting best fingerprinting map
- Used ANN as DL algorithm to predict Indoor localization using RSSI and SNR values

Mobile Learning Application – Chatting App **Spring '19**

- Developed a chat application for students' internal communication
- Hosted on **AWS** as a distributed server. Implemented End to End encryption for security using **RSA** algorithm.
- Keywords: Amazon AWS (EC2, RDS), MS SQL, Java, Android, Encryption Standards, REST API

University admission prediction **Fall '19**

- Implemented Simple Linear Regression to predict the chances of Admission using GRE score (**RMSE:0.095**).
- Implemented Multiple Linear Regression using LOR, SOP, CGPA, GRE, TOEFL scores (**RMSE:0.065, R2: 0.77**)
- Discretized "Chances of Admission" into 3 classes using bins and created Decision Tree Classifier.

Network Intrusion Detection **Spring '20**

- Implemented models like **KNN, SVM, CNN** to distinguish between intrusion or attacks (bad attacks) and good normal connections.
- Results proves that KNN was the most efficient one with **0.9909 F1 score.**
- Performed multiclass classification to find type of connection and **improved F1 score to 0.9987.**

Stock price prediction **Spring '20**

- Compared performance of various deep learning models like **LSTM and CNN** to predict the price of stock.
- RMSE value of **1.81** was obtained for **CNN** which was better in comparison to the RMSE value of **2.79** for **LSTM**

Steganography- Data Hiding **Spring '19**

- Designed a whole new tool in **Python** for demonstrating **Image Steganography**.
- This tool consists of 3 main phases: - Hiding secret data in an image file (Stego image), extracting the data from image file, analyze and compare the original image and the Stego image.

Embedded System for LPG gas leakage detection **Sept '16 – Dec '16**

- Implemented an IOT system comprising of Arduino and GSM module which is used to warn/alert user through a text message whenever the gas concentration of his/her house exceeded a certain limit.