DEEP GOSALIA

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EDUCATION

Dwarkadas J. Sanghvi College of Engineering, University of Mumbai, India **2016 - 2020**
Candidate for Bachelor of Engineering in Computer Engineering Current aggregate **CGPA - 8.57/10**

PROFESSIONAL EXPERIENCE

Speridian Technologies, Mumbai **June 2018 to July 2018**
Intern – Mobile Application Developer
Speridian is a global business and technology solutions provider with expertise in Digital Services.

- Worked on a mobile application project for Android and iOS using the React-Native(RN) framework.
- Developed a criteria-tailored camera module by modifying the NPM module 'rn-camera' and implemented an in-app image gallery for the same using 'rn-image-picker.'
- Analyzed and handled the storage of the files into the database of the application using various methods and tested the performance of the application for each of them.
- Assisted in designing the UI of the Application and creating a Map marker module for pin-pointing locations.

RESEARCH PROJECTS

Validity and Integrity check using Blockchain in Supply Chain Management (SCM) **Final Year Project - In Progress**

- Designed a blockchain-powered system which focuses on improvising on the shortcomings of the traditional Blood-SCM, namely lack of trust, fraudulent payment, excessive wastage of blood. Currently documenting a proposed architecture in a technical paper.
- Analyzing the blockchain network ledger for transparency in the system and implementing it using Ganache.
- Using Solidity, the system employs Smart Contracts that issues secure payment transactions based on the fulfilment of specific conditions, thus solving the issue of insecure payments.
- Implemented a waste management scheme that prioritizes dispatch of blood bags from the sections that are nearing their expiry, also considering the urgency of the request to appropriately decide on the cost calculations.

Normalizing Text using Language Modelling based on Phonetics and String Similarity **July 2019**

- A technical paper on this project is submitted to ACL2020 and is currently under the review process.
- Formulated a language model that normalizes an SMS input to the regular English text based on the BERT algorithm.
- Implemented NER for eliminating any Out-of-Vocabulary words including names of the organizations.
- Engaged various phonetic and string similarity metrics like Lein, Fuzzy Soundex, Metaphone and Jaro-Winkler, Qgram, Cosine, respectively along with Softmax function to improve the accuracy of the model using probability.

ACADEMIC PROJECTS

Sign Language Recognition using Sensors **April 2019**

- Created a system, comprising a few classifiers like LSTM, LR, ANN, and SVM that classifies various signs from the numeric sensor data provided as a supervised dataset.
- Trained the model using 2 different types of datasets for improving the accuracy of classification, High and Low-quality datasets.
- Employed PCA for dimensionality reduction, thus reducing the number of features to 3, aiding in efficient 3D visualization of the data.

Crime Management System **October 2018**

- Developed a Java-SQL, database and management software using NetBeans which maintains a database of the known criminals and suspects in a locality, and contains the information of the verdicts and penalizations charged.
- Designed a functionality for civilians to report a suspicious activity that will reflect an instant update in the database when a whistleblower reports a crime, anonymously or with recognition, alerting the authorities.
- Created the interface for the whistleblowers and police officers that can keep track of the actions taken by authorities on the reported crime.

SYSTEMS AND SOFTWARE SKILLS

- Programming Languages: C, C++, Java, Python, Solidity
- Databases: MySQL, MongoDB
- Technologies: Hadoop, Web Development, Mobile Application Development (React-Native & Android Studio)
- Systems: Windows, Linux, macOS

EXTRA-CURRICULAR ACTIVITIES AND SOCIAL SERVICES

- Actively participated in inter-college hackathons and successfully completed the 'Applied CS with Android' course offered by Google/Udacity (2017).
- Volunteered towards the tree plantation drive and the Beach clean Up event held by the NSS. Contributed to marketing the events and planning the logistics.