MIHIR GANDHI

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EDUCATION

K.J. Somaiya College of Engineering, Vidyavihar, Mumbai, India

October 2020

Bachelor of Technology (B. Tech.) in Computer Engineering

CGPA: 9.46/10 **Rank:** 1/152

Relevant Coursework: Data Structures, Analysis of Algorithms, Artificial Intelligence, Machine Learning, Theory of Computer Science, Discrete Structure and Graph Theory, Digital Signal and Image Processing, Applied Mathematics

PROFESSIONAL EXPERIENCE

Reliance Jio, Mumbai, India

July 2020 - Present

Deputy Manager in 5G Tech R&D

- Working on SIB project to enhance registration functionality and improve the QoS in IMS Core
- Responsible for developing registration process and user authentication procedure at S-CSCF
- Involved in implementing additional features in IMS and making the system 5G compatible

Eloquent Techart, Mumbai, India

June 2018 - July 2018

Android Developer Intern

- Developed an Android application for financial management and expense tracking
- Used Adobe XD as UX design tool, Android Studio as development environment, and Firebase as database

RESEARCH PAPERS

"Decentralized Freelancing System - Trust and Transparency"

- Mihir Gandhi, Priyam Shah, Devansh Solanki, Mihir Shah
- Proposed a blockchain-based decentralized freelancing system to ensure trust between employer and employee, and prevent issues such as late payment, delayed work, and unfair evaluation of work
- Published in International Research Journal of Engineering and Technology (IRJET), Volume 6 Issue 9
 September 2019 (e-ISSN: 2395-0056, p-ISSN: 2395-007)

"Smart Control of Traffic Light using Artificial Intelligence"

- Mihir Gandhi, Devansh Solanki, Rutwij Daptardar, Nirmala Shinde Baloorkar
- Proposed a system that utilizes live images from the cameras at traffic junctions for traffic density calculation
 using YOLO object detection and sets the signal timers accordingly, thus reducing the traffic congestion on
 roads, providing faster transit to people, and reducing fuel consumption
- Paper accepted for publication in IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE) 2020

ACADEMIC PROJECTS

Adaptive Traffic Signal Timer

- A research project to adjust the traffic signal timers based on real-time traffic density to reduce traffic congestion and optimize traffic flow using Computer Vision
- Trained a custom YOLO object detection model for vehicle detection to count vehicles by class such as car, bus, truck, bike, and rickshaw.
- Devised a signal-switching algorithm that sets signal timers according to the number of vehicles of each class
- Built a simulation using Pygames to measure its effectiveness over the fixed timer system
- The system reduced the waiting time of vehicles at traffic signals by 23%

Sign Language Recognition App

- Developed an application to identify hand gestures to assist people in communicating with the speech and hearing impaired using Deep Learning and Computer Vision
- Trained a Convoluted Neural Network on the American Sign Language dataset, which consists of 31,000 images of hand gestures for alphabets(A-Z) and numbers(1-9) using Keras
- Deployed the CNN in an Android app using TensorFlow Lite to enable offline and mobile use
- The CNN achieved an accuracy of 74% with an average detection time of 1.2 seconds

Hirechain - Decentralized Freelancing System

- A research project to create a decentralized platform for posting and accepting freelance jobs using Blockchain technology
- Used Solidity to implement the smart contracts and deployed them on Ropsten Testnet
- Developed a web application using HTML, CSS, and JavaScript, and deployed it on the Ethereum Blockchain
- Employed IPFS for distributed storage of user files such as resumes and consignment details

Meeting Minutes App

- Developed an Android application that converts speech to text to create a transcript of the audio and take down the minutes of a meeting using NLP
- Used IBM Watson Speech to Text API for real-time and accurate transcription
- Implemented a bag-of-words model for keyword extraction and text summarization

Inventory Management System for Photography Team

- Developed a Java application to keep track of the camera equipment exchanged among the members of the photography team during college festivals
- Created an intuitive GUI using Java Abstract Window Toolkit
- Implemented custom search capability for efficient utilization and better management of the equipment

ONLINE COURSES

- Computer Vision by University at Buffalo and the State University of New York on Coursera | Grade: 100%
- Neural Networks and Deep Learning by DeepLearning.AI on Coursera | Grade: 93.40%
- Algorithms by University of California San Diego and NRU HSE on Coursera | Grade: 100%
- Blockchain by University at Buffalo and the State University of New York on Coursera | Grade: 97.78%

TECHNICAL SKILLS

- Languages: Java, Python, C, C++, SQL, Dart, Solidity
- Web Technologies: HTML5, CSS, Bootstrap, JavaScript, PHP, Angular, NodeJS, ReactJS, Django
- Tools: Android Studio, Flutter, MATLAB, Adobe XD, Selenium, Git, AWS, Truffle
- Databases: MySQL, Firebase, MongoDB

ACHIEVEMENTS

- Recipient of the National Talent Search Examination (NTSE) Scholarship in 2015
- Received the President's Scout Award from Former President of India Pranab Mukherjee in 2015
- Awarded scholarship and certificate by KJSCE for securing 2nd rank in the first year and 3rd rank in the second year and third year of the B.Tech. program

LEADERSHIP AND EXTRACURRICULAR ACTIVITIES

- Photography and Videography Head of Maker Mela 2019 from Aug 2018 to Jan 2019
- Volunteered in Versova Beach Cleanup Drive organized by KJSCE Parvaah in Jan 2018
- Logistics Chief of Shutterbugs, the official Photography Team of KJSCE, from June 2017 to June 2018
- Event Head at Skream 2017, a National Level Sports event, from Oct 2016 to Jan 2017
- Completed Internet of Things (IoT) Certification Course conducted by E-Cell, IIT Bombay in Sept 2016
- Attended seminars on AI, ML, and Cryptography as a member of the Computer Society of India
- Participated in Cricket and Chess Tournaments at the District level
- Elementary Proficiency in Sanskrit, an ancient Indian Language