Mihir Gandhi

+1 (470) 815-5465 mgandhi39@gatech.edu mihir-m-gandhi mihir-m-gandhi.github.io

Education

Georgia Institute of Technology **August 2021 – May 2023 (Expected)**
Master of Science in Computer Science, ***GPA:*** *4.0/4.0* *Atlanta, GA*
Relevant Coursework: Computer Vision, Artificial Intelligence, Data Visualization

KJ Somaiya College of Engineering, University of Mumbai **August 2016 – October 2020**
Bachelor of Technology in Computer Engineering, ***CGPA:*** *9.46/10,* ***Rank:*** *1/152* *Mumbai, India*
Relevant Coursework: Data Structures, Algorithms, Operating Systems, Machine Learning

Work Experience

Georgia Institute of Technology **Jan 2022 – Present**
Research Assistant, KUKA Robotics Lab *Atlanta, Georgia*
- Working on Human Tracking and Pose Estimation under the guidance of Prof. Seth Hutchinson.
- Research focuses on multi-camera perception for achieving robust and reliable Human-Robot Collaboration.

Reliance Jio **July 2020 – June 2021**
Deputy Manager in R&D Team *Mumbai, India*
- Designed and evaluated S-CSCF server failover and failback strategies to drive down registration failure by 12%.
- Automated request-response counter analysis using a JS script, which reduced analysis time by 92%.
- Implemented enhancements in the IMS Core to support 5G interworking.

Eloquent Techart **June 2018 – July 2018**
Android Development Intern *Mumbai, India*
- 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.

Technical Skills

Languages: Python, Java, C, C++, JavaScript, Dart, SQL
Web Technologies: HTML5, CSS, Bootstrap, PHP, Angular, NodeJS, Django
Frameworks and Tools: PyTorch, TensorFlow, Android Studio, Flutter, MATLAB, Tableau, Adobe XD, Git

Publications

Sign Language Recognition using Convolutional Neural Network: Springer ICACDS 2021.
Smart Control of Traffic Light using Artificial Intelligence: IEEE ICRAIE 2020.
Decentralized Freelancing System - Trust and Transparency: IRJET Volume 6 Issue 9, September 2019.

Projects

Adaptive Traffic Signal Timer | *Python, YOLO object detection, Darkflow, Pygame*
- Built a system that controls traffic signals based on real-time traffic density to reduce the average wait time by 23%.
- Trained a custom YOLO object detection model to count vehicles by class (car, bus, truck, bike).
- Devised a signal-switching algorithm that sets signal timers according to the number of vehicles of each class.
- Showcased at a National Level Project Competition organized by Government Polytechnic, Mumbai.

Sign Language Recognition App | *Python, TensorFlow, Java, Android Studio*
- Developed an app that identifies sign language alphabets to aid in communication with the speech and hearing impaired.
- Designed a novel lightweight Convolutional Neural Network(CNN) based on VGG-16 architecture, which achieved an accuracy of 89% with an average detection time of 1.2 seconds.
- Deployed the CNN in an Android app using TensorFlow Lite to enable offline and mobile use.

Meeting Minutes App | *Java, Android Studio, Python*
- Developed an Android application that converts speech to text to create a transcript of the audio.
- 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.

Leadership / Extracurricular

Contributing Writer at Towards Data Science: Over 19k views to date, selected as Editor's Pick. *Feb. 2021 – Present*
Photography Head at Maker Mela: Led a team of 30 photographers and videographers. *Aug. 2018 – Jan. 2019*
Logistics Chief of College Photography Team: Managed a team of 50 students. *June 2017 – June 2018*
Event Head at Skream: Organized a National Sports Competition hosting over 100 institutes. *Oct. 2016 – Jan. 2017*
President's Scout Award: Awarded by Former President of India Pranab Mukherjee for exceptional skills as a boy scout.