JIGAR JIGNESHBHAI PATEL

Phone: (+91) 9408096140 jigarpatel2598@gmail.com

Address Gujarat, India - 396445

EDUCATION

B. Tech Uka Tarsadia University, Computer Engineering CGPA: 7.05 (Till 7th semester)

June 2020

TECHNICAL SKILL

Machine Learning: TensorFlow, scikit-learn, Google Cloud ML Engine.

Image Processing: MATLAB, Octave, OpenCV.

Programming Skill: Python, Embedded C, C, C#, Java. **Cloud and Distributed Computing:** Docker, GCP, AWS.

PROJECTS

Blockchain Based Digital Identity

Blockchain

ASRS (Autonomous Storage Retrieval System):

IoT, AWS, ML/AI

- → A system to place right material at right place at right time in industrial assembly line.
- → System makes use of AGV (Automate guided vehicle). User can schedule the AGV to pick up and deliver the material by remote UI.
- → AGV follows the path planning approach instead of traditional path following approach. When delivery is scheduled to any AGV, path is planned from pickup to drop point. IPS (Indoor Positioning System) is created to make AGVs aware of their current location as well as pickup and drop point.
- → A backend built on AWS services provides users seamless experience to interact with system and OTA (Over The Air) updates.
- → Cloud computing capabilities extends the supports for remote debugging of whole system as well as data analysis of the deliveries.

ACCIDENT PRONE DEVICE:

IoT, Firebase

→ An IoT device which tracks the condition of automobile using different sensors. On detection of accident it sends the SOS to ambulance and number selected by user.

OCR COMPILER:

Python Flask, ML

→ An idea to get the output of python program by just taking snapshot of it. Working on Machine Learning model to recognize handwritten text.

KEYBOARDLESS KYC:

Python Flask, ZAPPA, AWS

→ A simple but unique idea to extract the details useful for KYC (name, Gender, Date of Birth, Aadhar number) just by taking the snap of Aadhar card (Indian Identity Proof). Implemented as Serverless architecture with AWS.

MEANING SIMILARITY MEASUREMENT B/W TWO STATEMENT (MSMTS):

→ An Artificial Intelligence-based system to detect the similarity between meanings of 2 sentences. Currently working with TensorFlow text embedding to detect the similarity. This project is under development phase.

WATERLOGGING PREDICTION BASED ON RAINFALL: Tensorflow

→ The application can be developed by intergrating flask app with machine learning model that can give water logging current data based on the historic logging data available and prevent the damage that can be caused in tht area

INTERNSHIPS

NJ Technologies (FINLOGIC) Ptv. Ltd.

ML Intern (Dec19 June, 2020)

→ HANDWRITTEN CHARACTER RECOGNITION: Neural Network,OpenCV, tesseract

HCR that can effectively recognize a particular character of type format using the Artificial Neural Network approach. Neural computing Is comparatively new field, and design components are therefore less well specified than those of other architectures. Neural computers implement data parallelism. Neural computer are operated in way which is completely different from the operation of normal computers. Neural computer are trained (not Programmed) so that given a certain starting state (data input); they either classify the input data into one of the number of classes or cause the original data to evolve in such a way that a certain desirable property is optimized.

Twowards (Goldenmace)

IoT Intern (June, 2019)

→ Worked with IoT and AWS cloud Services created two Projects:

1. Smart water management System using Iot

Here, uses components like Arduino Uno, Raspberry Pi, nRF24l01(Transreceiver), Ultrasonic Sensor and made possible communication between them for transferring data. At backend side used services of AWS like Greengrass Core, DynamoDB, Lambda Function, S3 Bucket, API Gateway and AWS IoT. By integrating and implementing all this together the system work successfully

2. Candy dispenser with face recognition

The system which consists of a hardware part including the Raspberry–Pi with the compatible camera module either pi- camera or the webcam to take your picture with expression and instead of coin acceptor we will use RFID reader and tags also the software includes the bunch of AWS services like AWS lambda function to fetch or retrieve the data from topic using MQTT, AWS IOT-core which connect your device to AWS and AWS Rekognition for the Emotion Detection.

PROFESSIONAL TRAINING AND ACCOMPLISHMENTS

Workshop

- 1. Participated in 2-days workshop on NodeJS in Uka Tarsadia University and contributed total 16 hours on it.
- 2. Participated in Gesture Robotics workshop organized by IIT BOMBAY at Techfest-18 for 2 days

Certified online Courses

1. Basis of Blockchain from Coursera proposed by University of Buffalo

COMPETITIONS

"Sarthak" Surat region Hackathon

September, 2019

Secured **3rd position** in this event and created "water logging prediction using machine intelligence" continuously working for 24 hrs to create this project.

Gujarat Industrial Hackathon

September, 2018

"ASRS" and "Accident Prone Device", both project were selected for finals and worked continuously for 36 – hours to make one project.

SSIP Gujarat Hackathon

Feb. - 2020