**NAYANKUMAR SORATHIYA E-Mail:** [ns2984747@gmail.com](mailto:ns2984747@gmail.com) **Mobile: +91-9664919955**

**OBJECTIVE**

As far as teaching is concerned, I am looking for the best learning platform to learn and foster my knowledge to solve real-life technical problems and want to develop professional skills to achieve that. This can be done with proper knowledge and guidance at a technical institute.

**EDUCATION**

**A D Patel Institute of Technology, Gujarat Technological University | Ahmedabad (2021)** *July 2017- July 2021*

Bachelor of Engineering in Computer Engineering

**CGPA:** 9.51/10

**IELTS** (International English Language Testing System): **6.5**

**GRE (**Graduate Record Examinations**): 320**

**Gujarat Secondary and Higher Secondary Education Board - Gandhinagar, Gujarat, India**

**Higher Secondary School**: March 2017 **Secondary School**: March 2015

Percentage: 90/100 Percentage: 88/100

**PROJECT WORK DETAILS**

**Accident Detection using Internet of Things (IOT) |** *January 2019*Project Guide: Dr. Bhagirath Prajapati

* Developed device which installed in Motorcycle so that it detected accident using the angle and acceleration of the Motorcycle then it’s directly sent message with latitude and longitude of location to the emergency service, Police and Relatives.
* Also Implemented in CCTV cameras through TensorFlow library so that when an accident occurs on road, the camera will make the frame and compared accident footage with the pre-trained model(We trained 15,000 images of the accident), when it will match the installed system in cameras will send message to nearest emergency service.
* Technology & Tools: SIM 808: GSM+GPRS, MPU 6050, TensorFlow, Arduino Uno.

**Online Water-Supply Analysis |** *May 2019*Project Guide: Prof. Gopi Bhatt

* The aim of the project was to measure the daily water consumption of a house and show its data on website. Based on collected data, it gives an analysis of consumption and gives predefine suggestions.
* Technology & Tools: Water flow meter, WIFI module.

**Hospital Management System |** *December 2019*

* Developed website which contain three modules: Patient, Doctor, Admin Portal in which Patient can schedule appointment also add past health history while doctor can see all details of patient and admin have all access of the system.
* Technology & Tools: XAMPP(Server), PHP, MySQL, HTML, CSS, JS).

**Active Map Image Classification Using CNN |** *April 2021*Project Guide: Dr. Minal Patel

* Developed 3 models using convolutional neural network: image classification, image captioning, and visual question answering (VQA) models.
* Technology & Tools: Kaggle Database, CloudCV Open Source, HTML, CSS, JavaScript.

**SKILLS/HOBBIES**

**Technical Skills**: C, C++, JAVA, HTML, CSS, JavaScript, Arduino programming (IOT),

Basic Linux’s based operations, Google cloud platform.

**Soft Skills**: Problem Solving, Adaptability, Decision making.

**Hobbies**: Badminton, Chess, Cricket.

**INTERNSHIPS**

1. Participated in a one-month socio-political internship “**Countrybution-2018”** with the theme “**Transforming India Through Public Participation in Governance**” organized by Institute of leadership and governance, **The Maharaja Sayajirao University** of Baroda, Vadodara from 1st to 30th June 2018.

That internship was all about bringing changes in India with help of public participation in Governance. This internship mainly focused on the overall development of the candidate. Also, I met different personalities of India, such as Air force officer, Director General of Police, Soft skills coach, Karate trainer, and visited places like smart a village in Vadodara, Amul industry, State reserve police, Court of law. Before the end of the internship, I must take one project whose goal is to help the nation. So, I opted for banking awareness in poor workers.

1. Participated in 5-days online internship program on “**Advanced Web Designing**” conducted by CREART SOLUTIONS from 18th to 22nd May 2020.

During this five-day internship program, I learned advanced tasks and syntax of HTML, CSS, and JavaScript. Moreover, gain some professional guidance to work on live projects.

**PUBLICATIONS**

1. “**COVID-CAM**: A Method of Detection COVID using Active Map Classification, CNN, and Deep Learning”

*International Journal of Computer Applications (0975-8887) Volume 176 – Issue no. 38, July 2020*

The Novel Corona Virus (COVID'19) spread rapidly around the world and become pandemic. It has critical to detect the COVID'19 from the people and give the quick treatment of affected people due to no accurate toolkit available. They see many researcher-made detection methods using CT images this method is time-consuming and also does not give that much accuracy therefore for the early detection and accuracy we develop one model of AI system using computer vision and deep learning which can detect CORONA using chest X-ray (CXR) images that is open source and available to the general public. However model divide into two modules, the first module detects the COVID'19 using Chest X-ray images and the second module with help of the active classification map method gives results with high accuracy.

1. “**Privacy and Security issues in Big Data:** A Case Study of Characteristics, Challenges, and Solution”

*International Journal of Computer Applications (0975-8887) Volume 175 – Issue no. 12, August 2020*

Nowadays, Data is one of the most important recommendations for research in industry and academia. The continuous rapid growth in the volume of data like people's lifestyles, daily habits, and intended to save data from textual to images, videos, etc. have created a new problem and it's not handled by any traditional technologies. Solving this problem through the creation of a new paradigm: Big Data. But big data is a double-edged sword means it brings a solution volume of data but also brings certain risks also in terms of privacy and security. It is difficult to handle the security and privacy of the data in this paper we are discussing the Big data 10V's characteristics, challenges of the big data, and its a solution with research in all perspective areas.

1. “**IOT based Accident Detection Device**”

*International Journal of Recent Advances in Multidisciplinary Research (6098-6081) Volume 07 – Issue no. 07, August 2020*

Road traffic injuries (RTI) are worldwide health and constitute an oversized majority of the deaths caused by all injuries. Every year the lives of approximately 1.35 million people die because of a road traffic crash. I developed introducing the automated alert device for vehicle accidents. The proposed system detects the accident and sends the data in less time to emergency services like 108 in India. This can be unacceptably high when put next with international standards. An intelligent system for accident detection using a microcontroller like Arduino. When an accident occurs accident detection device detects an accident and communicates with the GPS module and acquires the placement of the accident spot and can send that location to their relations and emergency services. After an accident, if the rider is safe then he/she can send the message that “No need to worry, I'm safe” by pushing the protection switch.

**ACADEMIC AND CO-CURRICULAR ACHIEVEMENTS**

* Branch **2nd rank** holder of Computer Engineering Department in 2021.
* **Neo4j** certified professional, scored 91 out of 102 for **Neo4j Certification**.
* Secured **9th rank** in Finale of National Road Safety Championship, iSAFE – **The Safer India Challenge**– 2018 organized from September 2018 to May 2019 conducted by Indian Road Safety Campaign.
* **Winner,** SARTHACK-2019 Hackathon organized by AIC SURATi iLAB.
* **Finalist** of Smart Gujarat Hackathon 2019 held at **P.D.P.U**, Gandhinagar.
* Selected for Internal hackathon in **Smart India Hackathon,** 2020.
* Achieved **Google cloud platform** badges for various technological tasks.

**POSITIONS HELD**

* Technical Team Head **of IRSC-ADIT Chapter (Indian Road Safety Campaign).**
* Logistics Team Member of **Institution of Engineers (India) [IEI]** Student Chapter of ADIT (2018-19).
* Core Team member of Team “PRAYAS” - Which is working to create awareness about road safety among the students.
* Cadet rank in **Alumni Association of NCC (A.A.N).**

**WORKSHOPS ATTENDED**

* Participated in “**Computer Society of India** (CSI) Gujarat state **student Convention** 2018” organized by CSI.
* Attended workshop on “**VFX** **Programming and Special effects in film making**” organized by Computer Engineering Department under **IEEE CS and IEEE IAS** at ADIT on 19th march, 2019.
* Participated in seminar called “**Smart Computing**” at Sardar Patel College of Engineering on 15th February 2018.