SANKETH S HUDDAR

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+ CAREER OBJECTIVE

A proactive and fast learning individual seeking an opportunity to work as a dynamic data analyst utilizing analytical & methodical skills and relevant expertise to help the company achieve business goals while sticking to vision, mission and values.

+ EDUCATION

Course	College	Grades
BE – CSE	New Horizon College of Engineering	8.8 CGPA
12 th	CMR National PU College	84.33%
10 th	Cambridge School	90%

+ TECHNICAL SKILLS

- Programming Languages: Java, Ruby, C/C++, Ruby on Rails, Python, JavaScript, PHP, MATLAB, Verilog, CSS
- Operating Systems: Windows, Linux, Android, Raspbian OS
- <u>Systems and Platforms:</u> Raspberry Pi, Arduino, ESP32, Adobe Photoshop, IBM Bluemix Cloud Platform,
 Microsoft Office, TensorFlow, Google Cloud Platform, Eclipse, Android Studio and Octave

+ INTERNSHIPS

• <u>IBM, Silicon Valley Lab, USA:</u> Internship Program in IBM R&D Cell, Silicon Valley under the guidance of Mr. Thomas Troung (Program Director, Cognitive Open Technologies & Performance) and Mr. Ton Ngo (Senior software architect/developer) in collaboration with Google.

Project: Voice Based Browser Control

Internship Duration: Mar '18 – Present

Developed an ML model using Tesnorflow.js, trained it using IBM's server on a large dataset and achieved an accuracy of 92% in classifying voice commands for navigating websites.

• <u>IIT Kanpur, India:</u> Research and Development Internship at IIT Kanpur, India under the guidance of Dr. J. Ram Kumar (Head of 4i Labs, IITK)

Project: Food Computer

Internship Duration: June '18 – July '18

Created an environment for plant growth by controlling the temperature, humidity, pH, water level etc. using the corresponding sensors and implemented hydroponics principle to grow plants without any soil. Hence the whole process is automated by the Micro Controller without any manual input.

• <u>ITCA, Bangalore:</u> CubeSat Design and Development Internship at ITCA – 75 Satellites Consortium: India Mission 1947-2022.

Project: Cube Satellite

Internship Duration: June '18 – Ongoing

Developing a low cost Cube Satellite [3U], with custom payload for ADS-B and Hyperspectral Camera. Designed the Satellite Bus with the engineering model and prototype. Prototype Verified and Successful.

Samara University, Russia: Summer Space School + Internship [A United Nations Initiative]

Project: Nano Satellite

Internship Duration: Feb '19 – June '19

Nano Design and Development Internship + Summer School (**A United Nations Initiative**) at Samara Space University, Samara, Russia. Built a low cost state of the art nano satellite into advanced space technologies for Low Earth Orbit Satellites.

• Israel Space Agency: R&D Intern at Israel Space Agency + Tel Aviv University

Project: Cube Satellite

Internship Duration: May '19

Worked with the Israel Space Agency and Tel Aviv University to develop a low cost Cube Satellite Bus primarily aimed for students who can utilize this technology and attach their payload and send it to space.

+ PROJECTS

- Railway Signaling Systems: Developed a Wi-Fi controlled railway track monitoring system that monitors each train's motion on the tracks using RIR Sensors and controls it using multiple Raspberry Pi's. The Pi then controls the train motion and switches the tracks to avoid collision. This optimizes the motion of the trains without causing any collateral damage.
- <u>Telemetry Dashboard for Machines:</u> Developed a telemetry System to track the health, efficiency and performance of machine using IOT. It also uses a machine learning algorithm to predict the machine breakdown based on its history. A complete Dynamic and interactive Web Front end and an android app designed for the same.
- <u>Al based Application</u>: Developed an Al based application to help the uneducated villager to bring their business to a global platform. b. It helps them in increasing their profit by avoiding intermediaries. It also widens their potential buyers to a global market scale.
- Food Computer: Successfully designed and built a working prototype of a Food Computer, where are all the necessary conditions for a given set of plants are pre-fed to the system. Hence the user has to select the plant from the display and the system optimizes the functions such as temperature, moisture, light and nutrients for the plant.
- O 3D Concrete Printer: Successfully designed the model of a 3-D printer for buildings by using existing 3D printer command interface with a brand-new device that pours concrete along the path determined by the system.
- Advanced Social Networking Site: This Project intends to provide a well-established web-based social networking system scope, functionalities, requirements and feasibility. It aims at building a website which provides a communication among people on the network. It includes all the following features to have an attractive UI, Create User Accounts and Login, Follow Friends, Chat with online friends, Upload and share Images, Easy Password Recovery Process using tokens, Sha1 encrypted Passwords and Tokens and Comment and likes allowed
- <u>Supermarket Billing System:</u> A complete standalone C++ Project to handle a supermarket Billing with security and customization for the simplicity of the billing and accounts at a supermarket.
- WIFI Controlled Car: A Wi-Fi controlled car with sensors and semi-automation powered by Raspberry Pi 3B.
- Modular Satellite Bus: Successfully designed the Engineering model of 3U modular Satellite Bus with Onboard Computer, Communication Module, ADCS and the Power System.

+ ONGOING PROJECTS

- Working on Cashew Nut Sorting Mechanism that helps to sort and grade the cashews automatically using
 Image Processing and Neural Network
 [Expected to complete by January 2020]
- Working on a ECG and ICG embedded T-Shirt to help track a patient's health over mobile platform so that it causes no interruption to their day-to-day life.
 [Expected to complete by February 2020]
- Working on a 3D Printer for buildings by using existing 3D printer command interface with a brand-new device that pours concrete along the path determined by the system [Expected to complete by June 2020]
- Working on an IoT based system to help the farmers control their farmlands and make more produce in a more efficient manner.
 [Expected to complete by November 2019]
- Working on an AI based application to control the farmer's cultivation and provide an early disaster warning system.
 [Expected to complete by August 2019]

+ PATENTS PUBLISHED [As of July, 2019]

- Novel Apparatus, System and Method for a voice-based tool to have **Better Communication**. [E-2/2721/2017-CHE and Application No. 201741032337 Dt.13.09.2017]
- Novel Arrangement of Apparatus, System and Method using Artificial Intelligence (AI) techniques facilitates the fruitful interaction with uneducated users.
 [E-2/2719/2017-CHE and Application No. 201741032336]

- Novel Arrangement of Apparatus, System and Method for creating an efficient cloud platform where small and large enterprises can **exchange resources and work together** for mutual benefits.
 - [E-2/2718/2017-CHE and Application No. 201741032335 Dt.13.09.2017]
- Novel Arrangement of Apparatus, System and Method for creating an efficient cloud platform where all Stakeholders of agricultural industry.
 - [E-2/2717/2017-CHE and Application No. 201741032334 Dt.13.09.2017]
- Novel Arrangement of Apparatus, System and Method to Provide **Convenient E-Learning Platform** to Reduce Student Dropout Rates and Enhance Job Opportunities.
 - [E-2/2935/2017-CHE and Application No. 201741034937 Dt.03.10.2017]
- Novel Arrangement of Apparatus, System and Method for creating an **efficient cloud platform** where an Uneducated Villagers can Serve as Tourist Guides or Service Providers to Tourists.
 - [E-2/2936/2017-CHE and Application No. 201741034938 Dt.03.10.2017]
- Novel Arrangement of Apparatus, System and Method for creating an efficient cloud platform to help the Uneducated Farmers and Fishermen Regarding the Weather and Water Source Related Information.
 [E-2/2933/2017-CHE and Application No. 201741034935 Dt.03.10.2017]
- Novel Arrangement of Apparatus, System and Method as integrated **Farmer Information System** (FIS) [E-2/3626/2017-CHE and Application No. 201741041987 Dt.23.11.2017]

+ ACHIEVEMENTS

- National winner at the IBM Berkeley-Andhra Hackathon, conducted at KLU University, Vijayawada.
- Runner up at the TCS SAP Hackathon, conducted at New Horizon College of Engineering, April '18
- Runner up at SAP Hackathon in Machine Learning Model Deployment on SAP Platform, NHCE, November '18
- National Cyber Olympiad 2016 International Rank 8, State Rank 1
- **National Math Olympiad** 2015 International Rank -39, State Rank -7
- National Winner at BCIC 'Accelathon' 2019
- Special Jury Award at Aerothon '19 by Airbus India
- Special Jury Award at DevCode '19 at VIT, Vellore, Tamil Nadu, India

+ PUBLICATIONS

- As Author Compiled along with NHCE Team "Compendium of Students Satellites" Published by World Federation of Engineering Organizations-Committee on Information and Communication (WFEO-CIC) and Released by Honorable Chief Minister of Karnataka Mr. H.D. Kumaraswamy during 6th Indian Technology Congress held at NIMHANS Convention Centre on 05 September 2018.
- Published an article on the intensive research of Cryptocurrency Effects on the upcoming Future Technologies applications.

+ COURSEWORK

- Robotics Course from University of Pennsylvania, Coursera
- The Arduino Platform and C Programming, Coursera
- Introduction to Programming with MATLAB, Coursera
- Machine Learning in Octave and Google Cloud Platform, Andrew NG
- Applied AI with Deep Learning, IBM
- TensorFlow in Machine Learning and Practices, Go
- Ruby and Ruby on Rails Development