

KABIIR KRISHNA

kabiirk.github.io

7th Semester VIT student, seeking opportunities in domains like (A). Automation with IoT, (B). Embedded Systems, (C). Strategies to integrate disruptive automation technologies to achieve higher degree of intelligence, integrity & interactivity during Data-acquisition-Processing-&-Analytics phases.

Skills

Academics

Assembly

C++

Javascript Python

Dart

Tools

PowerBI AVRDude AVR Studio (32-bit) Flutter (Android) D3.js Docker Kubernetes **B.Tech**. 2017 - Present

Vellore Institute of Technology

Pursuing Bachelor of Technology in Electronics & Communication Engineering with specialization in Internet of Things (ECE spl. in IoT and Sensor).

10th & 12th CBSE

2015 - 2017

DPS Dwarka, New Delhi

9.4 GPA in 10th & 88% aggregate in 12th.

Proffessional Experience

Internships

1. IBM-GBS Divison, Bangalore

Apr'20 - June'20

As IoT Solution data-architect for a "Smart-Surveillance" Project that IBM was implementing for a London HQ'ed Security Services MNC. My role was to (A). Use ETL process, to design a Python-based scalable data-transport service for real-time video-feeds of human faces, objects & events as captured at public junctions, and fed into the IBM Visual Insights (IVI) Analytics Platform, which finally relayed the meta-data & video outputs to client's front-end Application and Object-Storage as well as populate MongoDB, (B). Create an intelligent Services Solution & fault-tolerant architecture using a decentralized SOA and Secure Data-streaming, (C). Come-up with a Solution that included creation of raw datasets, training and testing of the surveillance model & (D). Leverage technologies like Kafka, Kubernetes and Docker etc.

2. Deloitte-IMA Division, Gurugram

May'19 - July'19

As a Project Analyst, my learnings from the Project were (A).NLP-based engine as applied to the FMCG Industry, (B). Analytics Engine, (C). PowerBI as a Data Visualization tool. Their client was a UK-HQ'ed global FMCG leader whose sales data was extracted from e-commerce websites like Amazon to do a "buyer sentiment analysis" for their best-selling soaps. The Project's outcome was to highlight inherent business opportunities for that category of products, backed by the results of Analytics as applied to the base data.

Microsoft Student Partner Program

Aug'19 - Present

VIT, Vellore Knowledge Community

As a part of the MSP community, I evangelize Microsoft Technologies by conducting workshops for peers & juniors.

Head of University Affairs

July'17 - July'20

Computer Society of India-VIT Student Chapter

Led the creative content design team as a Board member of the Chapter, I mentor my juniors in creative content design and have been organizing one of South India's biggest annual Tech Conference **DEVSPACE** for the past 2 years.

Projects

IoTomize

The Project created an end-to-end IoT-based Home Automation Solution. We used RFID-validation along with data originating from sensors like DHT-11 to manage motor-controlled motion. Project provided a unified platform to measure, analyze and actuate physical action. Multiple components like interfaced sensors worked in tandem with data residing on Azure Cloud and a Dashboard was created to pull & visualize the same as graphs. It coupled automation in Data-collection along with Analytics that can also be exploited to offer greater control in reducing electricity consumption based on human presence in any corner of home via real-time monitoring & switching-off of electrical devices viz. lights, fans, AC, TVs, etc.

Smart Parking System

Objective of this Project was to find location of an empty Parking-slot using a mobile application. Designed around embedded systems, it involved interface between Micro-controllers viz. ESP8266 (NodeMCU) & Atmega16A and allowed for serial communication between them.

Sentiment & Emotion Analysis with Data Visualization

This was an emulation over the Deloitte Project done in summer of 2019. It focused on raw data-sets related to public opinion as expressed on e-commerce platforms w.r.t. mobile phones as the product in question. Data extraction involved it's cleaning too so as to be properly analyzed & presented. It was extremely insightful as it demonstrated that there is much more to Data Science than just Machine Learning. Data pipe-lining plays a significant part in data cleaning as a lot of the world's data is 'raw' and needs to be processed in order to generate workable insights.

Smart Health Monitoring System

Goal: Allow real-time measurement of patient's body vitals e.g. heart pulse-rate, temperature, orientation etc. and set-out an alarm when these parameters violate a pre-defined range. Sensors Used: DHT-11 (temperature & humidity), MPU-6050 (3-dimensional, 6-axis orientation) and Pulse-Sensor (pulse-rate).

Application Suite: Blynk (freeware)

Project involved interfacing sensors with NodeMCU micro-controller, signal extraction and transporting body's vital health parameters/data to the Blynk app in order to detect health emergencies in real-time w.r.t. heat-strokes, arrhythmia, high/low BP and body-balance.

Thoughts & Ideas

I aim to use disruptive technologies like IoT Neural Networks, Quantum Circuits, NLP and Deep-Learning coupled with my knowledge of electronics and embedded systems to come up with intelligent IoT-based Solutions for the future.









Kabiir Krishna

