

# Vinay Kumar Camarushi

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## Summary

Skilled and efficient Software Engineer with 1.5 + years of experience. A dedicated problem solver with high caliber coding experience with Python 3 and supporting libraries of Python, Java and C. Through my work experience, I have gained hands on experience in industry-standard development and look forward to applying those skills for my employer while making a significant contribution to the success of the company and grow my skills, at the same time.

## Core Competencies

- |                      |          |                   |                    |
|----------------------|----------|-------------------|--------------------|
| • Java               | • Python | • C/C++           | • Machine Learning |
| • Pandas             | • SQL    | • Mongo DB        | • Image Processing |
| • Power BI Reporting | • Flask  | • Microsoft Azure | • Apache Hadoop    |

## Experience

### TATA Consultancy Services, Hyderabad, India

#### Software Engineer

January 2021 – August 2022

- Single-handedly designed and developed Python code for automating manual tasks to prepare data for creating Power BI reports.
- Significantly improved process in daily activity by automation using Python which decreased manual effort by 80% and was lauded in the team by the manager and client manager for this improvement.
- Developed and monitored Power BI reports for Commercial and Performance for the client Diageo Great Britain Pvt. LTD.
- Created Views in SQL Server Management Studio for a better understanding of data as per business requirements.
- Optimized Tabular Model in Visual Studio for creating semantic model objects like tables, partitions, relationships, hierarchies, measures, and KPIs.
- Redesigned errors in Azure Data Factory Pipelines.
- Successful delivery and maintenance of data quality reports for comparing data at the source and the data in the Power BI reports.

## Education

### University of Central Missouri, Warrensburg, Kansas

August 2022 – May 2024

Master of Science in Computer Science (GPA: 3.66)

- Relevant course work: Machine Learning, Big Data Analytics, Statistics, Advance Database Systems, Advanced Algorithms, Advance Operating Systems, Compiler Design & Construction and Database Theory

### Sagi Rama Krishnam Raju Engg. College, Bhimavaram, India

July 2016 – September 2020

Bachelor of Technology, Electronics & Communication Engineering

- GPA 8.31 (On Scale of 10 points)

## Publications

- **International Journal of Advanced Science and Technology:** Defect Detection in Printed Circuit Board(PCB) using Image Processing Vol. 29, No. 4s, (2020), pp. 1205-1210.

## Accomplishments

- **Certifications:** Microsoft certified **Data Analyst Associate (DA - 100)**  
Microsoft certified **Azure Fundamentals (AZ - 900)**  
Microsoft certified **Data Fundamentals (DP - 900)**
- Participated in the final round of **Smart India Hackathon, Software edition** of World's biggest **Hackathon** conducted by **Government of India** in the year 2018.
- Awarded as best software engineer in **Spardha 2k18**, which is a hackathon conducted by Sagi Rama Krishnam Raju Engineering College for implementing best techniques of Image Processing (OpenCV) to get accurate results.
- Selected as **Executive Body Member (EBM)** for the national level student organization **The Institution of Electronics & Telecommunication Engineers**.
- Organized **Image SENSING ROBOT WORKSHOP** in **TRANCE2K19**, a national level technical symposium organized by Dept. of Electronics & Communication Engineering, Sagi Rama Krishnam Raju Engineering College.
- Organized **ENCENDER**, an event conducted by IETE Student forum in Dept. of Electronics & Communication Engineering, Sagi Rama Krishnam Raju Engineering College where seniors guide juniors in their academics.
- Volunteer **NIPUNA18**, a national level technical symposium on interpersonal and management skills organized by S.R.K.R I.S.T.E.

## **Academic Projects:**

### **Online Grocery ecommerce Site**

**August 2023 to December 2023**

- Flask, Python, Mongo DB and HTML & CSS are used in this project.
- Cloud technology used is **AWS**.
- Duration is 4 Months.
- This ecommerce website deals with the sales of grocery items. The admin portal of this website is responsible for managing the grocery items of the store. This ecommerce site is deployed to AWS cloud so that the website can be accessible in any other pc.

### **Empirical Evaluation of Machine Learning Techniques for Text Classification**

**January 2023 to May 2023**

- Python & libraries like Pandas, matplotlib, numpy, sklearn are used in this project.
- Duration is 4 Months.
- The capacity of machine learning (ML) algorithms to automatically identify patterns from data has led to promising outcomes in text classification. However, choosing the best ML method and its related parameters can be difficult and have a big impact on how well the classification model performs. We have used models like Logistic Regression, Decision Tree, Random Forest, KNN, Naïve Bayes, SVM to compare their performance in classifying the text documents.

### **Large Scale Matrix Multiplication using Hadoop MapReduce**

**April 2023 to May 2023**

- Java & Hadoop(MapReduce) are used in this application.
- Duration is 1 Month.
- Some real word problems, matrices are very large in size that is very time-consuming operation even though there are execution strategies on regular matrices and sparse matrices. Hence a MapReduce application is used to solve the problem of multiplying matrices of larger order in lesser time efficiently.

### **Airline Ticket Management System**

**August 2022 to December 2022**

- Flask, Python, Mongo DB and HTML & CSS are used in this project.
- Duration is 4 Months.
- 100% accuracy in output.
- Online Air ticketing is a kind of user assistance where customers can reserve tickets for flight in online. This project is entitled, designed and implemented in such a way that it can be applicable to any airlines. The feature of this system will be similar as a common ticketing system with an Admin Portal who can manage all the information of the website.

### **Defect Detection in PCB Using Image Processing**

**November 2019 to March 2020**

- Python is used in this project.
- Duration is 5 Months.
- 100% accuracy in output.
- A Printed Circuit board (PCB) is used to connect different electronic components mounted on it using pathways or tracks. An automated visual printed circuit board (PCB) inspection is an approach used to counter difficulties that can arise during human's manual inspection.

### **Crack Detection Using Image Processing**

**March 2018**

- Python is used in this project.
- Duration is 5 Days.
- 95% accuracy in output.
- Since the manual approach completely depends on the specialist's knowledge and experience, it lacks objectivity in the quantitative analysis. So, automatic image-based crack detection is proposed as a replacement.

### **Leukemia Detection Using Image Processing**

**December 2018**

- Python is used in this project.
- Project duration is 5 days.
- 100% accuracy in output.
- The visual analysis of peripheral blood samples is an important test in the procedures for the diagnosis of leukemia. Automated systems based on image processing methods can speed up this operation and increase the accuracy and homogeneity of the response also in telemedicine applications.