

# P SABRISH KUMAR

+91 9962830327 ◇ dubblin27@gmail.com ◇ github.com/dubblin27 ◇ linkedin.com/in/dubblin27

## EDUCATION

---

**Madras Institute Of Technology, Anna University, Chennai**  
Bachelor of Engineering in Computer Science and Engineering  
Department of Computer Technology

*August 2017 - Present*  
Cumulative GPA : 7.55/10

**Anna Gem Science Park School, Chennai**  
Higher Secondary Certificate (HSC)

*July 2015 - June 2017*  
Overall Percentage: 87.17

**Bala Vidya Mandir, Chennai**  
Secondary School (SSLC)

*June 2015*  
Cumulative GPA : 7.6/10

## TECHNICAL STRENGTHS

---

<b>Programming</b>	Python, C++
<b>Web-Development</b>	HTML, CSS, Java-Script, Ruby on Rails
<b>Databases</b>	MySQL, Postgres SQL, Mongo DB, Oracle Database
<b>Frameworks</b>	Scikit-Learn, Numpy, Pandas, Matplotlib, Tkinter, Tensorflow, Keras
<b>Cloud and Version control</b>	Git, Google Cloud
<b>OS</b>	Linux/Windows

## TECHNICAL EXPERIENCE

---

**TESARK Technologies, Chennai, India**  
*Full Stack Developer-Intern*

*May 2019 - July 2019*

Developed a Website for a client using Ruby On Rails, HTML5, CSS and JavaScript as the Front-end and Postgres SQL as the Back-end Database.

**Department Of Computer Technology, MIT**  
*Application Developer*

*Jan 2020 - Feb 2020*

Developed a Mobile Application for a Department technical Symposium using Flutter and Android Studio.

**Department Of Computer Technology, MIT**  
*Web Application Developer*

*July 2019 - Sep 2020*

Devised a Department website for Computer Science department, MIT using HTML5, CSS, JS, PHP for the Front-end and used MySQL for the Back-end Database.

## RESEARCH EXPERIENCE

---

**Supervised-Learning Approaches to Inter-UAV Collision Avoidance**

*March 20 - May 20*

Working on developing new approaches to detect the velocity of drones using coordinates in each step movement and avoiding the collision of multiple drones. Developed a 2D pattern formation of N-Drones and its simulation.

**2-Dimensional Pattern Formation for N-Drones**

*December 2019 - January 2020*

Devised a 2 Dimensional Pattern Formation for N-Drones interconnected in network and its simulation that works on  $O(n)$  for convex polygons in cyclic manner. This method maps a particular distance to

the point on the locus of the polygon corresponding to the distance given.

### **Mitigation of DDoS attacks Using Software Defined Network**

*June 2019 - Nov 2019*

Proposed a theoretical approach to counter measure the SYN flood attack by implementing a system that increases the TCP backlog and recycles old connections. The system is implemented as an extension in the control plane and monitors all the traffic moving to the server.

## **PROJECTS**

---

### **Mask Detection System**

The project mainly focuses on recognizing people who are wearing masks. This is a classification cum recognition based project. The model is trained using Tensorflow-Keras. Implemented Graphs for the training accuracy, loss, and validation accuracy, loss. In the GUI developed using Tkinter, a photo can be uploaded and the classification can be done with the already trained model which obtained an accuracy of 89 percent .

### **Traffic Sign Detection**

The Project is accomplished using Deep Learning Techniques using Tensorflow and keras with a Convolutional Neural Network Model with an accuracy of 94 percent. A Gui was developed using this model in which the traffic sign images could be uploaded and the classification is done.

### **Movie Recommender**

Deployed a Movie Recommendation System based on Memory based collaborative filtering algorithm by cosine similarity and Singular Value Decomposition. Recommended Movies based on User-item Filtering and Item-Item Filtering and also used RMSE.

### **Diabetes Perception System**

Devised a MLP model for the better prediction of diabetes for the age group of 30 to 60. Obtained an accuracy of 87 percent. In addition, used different models to differentiate the accuracy.

### **Breast Cancer Detection**

Designed a model that classifies and predicts malignant or benign cancer. The dataset was loaded into different models and the accuracy was predicted and compared. A new modified algorithm has been used which gives a prediction accuracy of 93 percent.

### **A\* Path Finding Visualization**

Built a path finding Visualizer to visualize the shortest distance between two nodes using the A\* path finding algorithm. As the A\* Path Finding algorithm is an informed search algorithm, it is the most efficient algorithm compared to standard algorithms such as DFS or BFS

## **ACADEMIC ACHIEVEMENTS AND EXTRA-CURRICULAR**

---

Second Place in Hexathlon Competition at Prayathna Symposium at Madras Institute of Technology.

First place in Reverse Coding in kurukshetra held at CEG, Anna University

Won Prizes in various competitions held at ITRIX Symposium in CEG, Anna University

Co-Organized Prayatna 2020 - A National Symposium of Computer Technology Department of MIT

Attended a SDN workshop at CEG Anna University