# Sumanth Rao

Algorithmic thinking,Passionate coding and Monomaniac effort are the three pillars to solve any problem in computer science.

Bangalore
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## EDUCATION

### National Residential School, ICSE
High School and Intermediate

10th – 93% , 12th – 96%

### Pes University, Bangalore — *B.Tech*
AUGUST 2015 - JUNE 2019

CGPA – 9.3

## EXPERIENCE

### Edurer Knowledge labs, Bangalore — *Android Developer Intern*

May 2017- June 2017

Built an interactive Chat Bot using AIML, Django, and other Android Libraries that provides a platform for students to chat and discuss the doubts with their academics and resolve the same.

### Centre for Cloud Computing and Big Data, Research Intern

June 2017 -Present

Research oriented study of the performance of various versions of Hadoop and Spark in varied CPU settings.

### Centre for Pattern Recognition and Machine Intelligence,

August 2017 - Present

Working on Machine learning and Prediction techniques to tackle the general pattern recognition problems.

## PROJECTS
### Machine Learning
### Devanagari Character Recognition
Tensorflow, Keras, OpenCV, Accuracy - 98%

Manuscript Devanagari script recognition using OpenCV and classification using Convolutional neural networks built on Keras and tensor flow.The model is 98% Accurate.The future prospects of this project also include collaboration with Sanskrit Library  to build a digital Manuscript library.Project guide – Prof. A Vinay, CPRMI PESU

## ORGANISATIONAL POSITIONS

**Secretory** - IET Student Chapter.

**Team member** –Collegiate Social Responsibility Club.

**Organiser** - The Epsilon Science Fest 2015.

**Volunteer** - AatmaTrisha,RCP Blood Donation camp.

**College Head Boy** - 12th Standard

**Cultural Head** - NRS, 10th standard

## SKILLS

- Adaptability.
- Team Player.
- Handling unprecedent conditions.
- Realistic Goals and meeting the deadlines.
- Time management.
- Never give up!

## LANGUAGES

English,Kannada,Hindi

## Cancer Inhibitors-Healthcare

ANN, h5py, SVM, Accuracy - 90%

Cancer inhibitors are proven to have a significant impact on cancer treatment in chemotherapy.Given a chemical molecule predict whether it could be used as an inhibitor for a particular carcinogenic protein(kinases) or not.Dataset-kaggle.

## SnapSudoku - Sudoku Solving bot

OpenCV,python,Artificial Neural Networks

Click a picture of a sudoku, upload it to the application and it does the job for you.Process the image using OpenCV, identify the digits using ANNs built from scratch using python and solve using the sudoku-solving plugin.

[Data Structures](#)

## Suffix Trees and Document ranking

Java

Implemented the construction of suffix trees from scratch and pattern finding using the same.Also includes Document ranking for a query search using relevance criterion for matching.

## Game of Life Simulation using B+ Trees and B Trees Implementation.

C, Javascript

Implemented the simulation of game of life using John Conway's rules and the UI was done using javascript libraries,with the backend supported by B+ trees.

Implemented B trees insert , search and delete operations.

[Web and Android Development](#)

## MakeMyEvent - Android App

A fully sophisticated app that lets the user design the venue for special occasion like birthday,bachelor party,official meetups etc. using our innovative UI and app also suggests nearby party halls and the decorators at one stop.

## PhotON-Image sharing site

Php, Javascript, html

This is an image sharing site and networking application that works like Instagram and we have deployed it in the cloud using OpenStack handling multiple users and servers.

**OTHER PROJECTS**

Sentiment analysis on twitter data

Object classification and recognition

Agrimitra- farmer friendly app to help farmers.

Ecommerce app - android

Hotel booking website- Php, JS

## SKILLS

Java

C

Machine Learning

Image processing

Python,numpy,pandas

Web development and Android

Tools

Cisco packettracer, Matlab/Octave, SciLab,

Other skills

HTML, JavaScript, PHP, CSS, Node.js, R ,MySQL,
MongoDB, Ember.js, CouchDB

## WORK SAMPLES AND PORTFOLIO LINKS

- Github        -  github-sumanthrao
- Hackerrank -  hk-sumanth
- LinkedIn     -  mylinkedIn
- Kaggle       -  mykaggle

## ACHIEVEMENTS

- Secured 94th Percentile in National Programming Aptitude Test 2017 conducted by NPTEL.[link to certificate]
- Won the top 10 in init mobile development Hackathon conducted by PES University.
- 80th Percentile in algorithms on Hackerrank.
- Open source Contribution - Coala Developer
- Secured 30th Rank in National level GK Quiz Competition conducted by Centre for human Resource Development.
- Won First place in AICS Debate competition in 10th standard.

## COURSES (MOOCs)

- Machine Learning by Andrew Ng,Stanford - Coursera
- Deep Learning and Text capture by Siraj Raval and Google - Udacity
- Data Structures in Java by UCL- Coursera