SUVVARI VENKATA SAI | 20CS10067

COMPUTER SCIENCE & ENGG. (B.Tech 4Y)

EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2024	B.TECH	IIT Kharagpur	9.08 / 10
2020	CBSE, Class-12	MP&EV English Medium School	93.8%
2018	CBSE, Class-10	MP&EV English Medium School	91.6%

PROJECTS

TAAS: Travel Agency Automation Software **[Mar'22-Apr'22]**

- Developed a web application that can be used for a car rental agency to organise the car bookings, customers, car repair etc.
- Designed front-end using **HTML**, **CSS** and **Java Script**. Used **Flask** and **flask-sqlalchemy** for back-end and databases.
- Achieved final web application with features like renting customer based on distance travelled and time taken whichever is maximum, checking statistics of spending and revenue generated at admin end, listing cars, listing customer, etc.
- Hosted this on **Heroku cloud application platform** for live performance of this web application for the presentations.

Java console app for online medical shops **[Jan'22]**

- Developed console based application for managing activities at online medical shops for better organisation.
- Coded using **java** for console interactions such as adding the product to inventory, registering a customer/delivery agent etc.
- Achieved a console based application with features of adding items to inventory, taking customers orders if required conditions are met, assigning order to delivery agents with minimum orders delivered and as same locality as customer etc.

C++ console app for OSM file **[Jan'22-Feb'22]**

- Developed a console based application that can parse an **OSM(open street map)** file and store cities and roads with their respective ID's, also locate cities/roads and routes with given substring of names of cities/roads.
- Coded using **C++** and using the **Rapid XML** library to parse the **OSM** file.
- Achieved a console based application features of finding the city/route code on giving the substring of the city/route name, finding **crow fly distance** between 2 given cities and finding whether a road connecting those cities exist.

Building Python module **[Feb'22-Mar'22]**

- Developed a python module for formatting images and applying borderlines colors to the top-3 segmentation of image.
- Coded using python and using modules like **numpy** for working with pixels of image and getting the segmentations, **pillow** for drawing border lines and applying the colors to segmentations and blending it with original one.
- Also used **Tkinter** for designing gui for selecting a PNG image and built it as a module that can be downloaded and installed.
- Achieved a python module that can be installed and used to play with the images by rotating, rescaling, resizing, blurring and flipping and also can be used to apply the segmentations of the top-3 segmentatoins.

Building a C libraries **[Feb'22]**

- Developed a static library and a dynamic library that is built using the language C and for the C language.
- Dynamic library consists of the datatypes **Linked List**, **Stack**, **Queue**, **Heap** and **Union Find** and their functions.
- Static library consists of the datatype **Graph** built using previous data types and their functions.
- Designed a make file for the libraries to get installed after downloading them in **Linux** operating system.

AWARDS AND ACHIEVEMENTS

- **KVPY scholar**- secured all India rank of **467** in KVPY scholarship exam - 2018 (SX-stream) 50 thousand students in India.
- Selected to INCHO-2019 through NSEC-2019 (National Standard Examination in Chemistry) among 50 thousand students.
- Placed among top **1%** in NSEP-2019 (National Standard Examination in Physics) among 54 thousand students in India.
- Secured all India rank **841** in IIT-JEE Advanced 2020-2021 among 1.51 lakh students in India.
- Achieved **99.98** percentile in JEE-MAINS 2020-2021 among 8.69 lakh students with all India rank of **271**.

SKILLS AND EXPERTISE

Programming Lanuages: Proficient: C, C++, HTML, CSS | Basic: Python, Java
Libraries and Framework: C++: Rapid Xml | Python: Tkinter, Numpy, Pillow, Flask, Jinja2, Flask-sqlalchemy

COURSEWORK INFORMATION

(I) Programming &Data Structures (II) Probability &Statistics (III) Algorithms-1 (IV) Formal Language and Automata Theory (V) Statistical Inference (VI) Software Engineering Course (VII) Switching Circiuts and Logic Design (VIII) Systems Programming (IX) Basic Electronics (X) Discrete Structures (XI) Advanced Calculus (XII) Linear Algebra and Numerical Analysis

EXTRA CURRICULAR ACTIVITIES

- **Social and Cultural:** National Service Scheme(NSS) Volunter at Indian Institute of Technology Kharagpur for two years.
- **Sports:** Won in carroms tournament and volleyball tournament held in school annual tournaments.

!self declaration by the student