# Patnala Shyam Ram

### Education

IIT Hyderabad July 2024

Bachelor of Technology in Chemical Engineering

Sri Chaitanya Junior College

Higher Secondary School (APBIE)

CGPA: 9.94

Experience

PayMatrix May 2024 – July 2024

Software Development Intern

• Worked with WSO2 to develop API Manager.

- Integrated Payment Gateway with these APIs with One Time use option and Subscription model.
- Refractored code to make with new libraries and made it more reusable.
- Skills: Python, Flask, OpenCV

## **Projects**

## Job Portal App | MERN 2024

- Designed and developed a multi-user application for users to search and post jobs.
- Utilized MongoDB as the database to store and retrieve data, developed the server-side using Express.js, implemented the responsive user interface using React.js .
- Implemented authentication and authorization features for secure user access to different application resources.

## Real-Time Face Mask Detection System | python, openCV, Tensorflow, Keras

2023

CGPA: 7.25

May 2019

- Designed a convolutional neural network (CNN) model to accurately identify face masks in real-time using webcam input.
- Ensured high precision and reliability through extensive model training and optimization, resulting in a highly accurate detection system with an achieved accuracy of 98.83%.

## Path Finding Visualizer | Python, Algorithms

2023

- Implemented a GUI which finds the optimal path in a maze that is generated randomly through recursive division algorithm
- Implemented real-time updates to display the A\* algorithm's progress, highlighting the visited nodes and the path.

#### Personal Portfolio Website | JavaScript, BootStrap, jQuery, HTML, CSS

2023

 Developed a dynamic portfolio website using JavaScript, jQuery, and Bootstrap to showcase web development skills and deployed on AWS.

#### Stochastic Simulation of Covid-19 Epidemic | C. Matlab

2022

- Implemented a graph-based model to represent the spread of COVID-19 epidemic.
- Simulated the transmission dynamics, accounting for infection rates, incubation periods, and recovery rates based on the latest scientific knowledge.

## Development and Management of Database | Python, Postgre SQL

2021

- Designed a flexible and efficient relational database from scratch for a scientific research paper inquiry website with the 'referential integrity' maintained.
- Developed informative ER diagrams, efficient relational table schema and retrieved information with complex queries.

## **Technical Skills**

Languages: Python, C/C++, HTML/CSS, JavaScript, SQL

Web Development: MERN Stack, bootstrap, jQuery Machine Learning: Scikit-Learn, Tensorflow, Keras

Coursework: Data Structures and Algorithms, Database Management Systems, Operating Systems, Probability, Statistics, Linear Algebra, Calculus, Differential Equations.

#### Achievements

- Secured AIR 11375 among 0.15 million candidates appearing for the test in JEE Advanced 2019.
- Expert on codeforces(Peak Rating: 1560).
- Secured 2497 Rank in AP Eamcet out of 3.38 Lakh candidates .