SAMALA KARTHIK

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EDUCATION

Chaitanya Bharathi Institute of Technology, Hyderabad **Nov 2022 – Present**
B.E. - Computer Science Engineering (AI and ML) ***CGPA - 9***

Sri Chaitanya Junior Kalasala **May 2020 - Jun 2022**
Class XII ***Percentage - 98.2%***

Aurobindo Public School **2020**
Class X ***Percentage - 88.4%***

TECHNICAL SKILLS

Programming Languages: Proficient: Python, SQL | Familiar: Java, JavaScript, R
Technologies/Frameworks: HTML, CSS, JavaScript, ExpressJS, NodeJS, MongoDB
Developer Tools: VS Code, PyCharm, Git.
Soft Skills: Problem-Solving, Teamwork and Collaboration, Adaptability, Time Management and Creativity.

PROJECTS

Web Application on Cancer Fund Raise | HTML, CSS, JavaScript **May 2024 - Jun 2024**

- Taking a random designed theme as a reference, I have built a Cancer Fund Awareness web application. It tells about the problems faced by the people suffering from different cancers.
- Explains various types of cancer. People can also donate using this application, and they can view the overall fundings on the webpage.
- HTML is used for structure, CSS plays a major role in attracting users' attention, and JavaScript controls user payments through event functions.

Employee Login Page | HTML, CSS, JavaScript, Angular, Firebase **Jun 2024 - Aug 2024**

- Secure login using Firebase Authentication, with Angular form validation for email/password input and session management.
- Employee data is managed in Firebase Firestore, enabling real-time syncing and role-based data retrieval.
- Built with Angular Material, the page is mobile-friendly and ensures smooth navigation and user experience across devices.

Automated Bus Scheduling and Route Management System | **Sep 2024 - Present**

HTML5, CSS3, JavaScript, Node.js, Express.js, MongoDB, Pandas, CSV Parsing, Genetic Algorithm, Map APIs like Google, Open Street Maps

- Our solution integrates Genetic algorithms, data analytics, and Geographic Information Systems (GIS) to automate and optimize bus scheduling and route management. It includes features for both linked and unlinked duty scheduling, and a visual mapping tool for existing and proposed bus routes.
- The system replaces manual scheduling with automated processes, reducing time and errors, and provides real-time data and route visualization to enhance operational efficiency and service reliability.
- The solution uniquely combines real-time data analytics with GIS technology to offer dynamic scheduling adjustments and automated route optimization, featuring intelligent overlap detection and enhanced resource management.

COURSEWORK

- Data Structures and Algorithms
- Operating Systems
- Object-Oriented Programming
- Web Technologies
- Basics on Data Science
- Data Base Management System
- Basics on Machine Learning

CERTIFICATIONS

- Programming in Java - NPTEL
- Data Science Foundation Certification - Infosys Springboard
- Gen AI - Google Cloud
- Machine Learning - 1Stop ai