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|  | Sahitya Kota |  |
| **CONTACT**  6305804823 Email icon sahitya\_kota@outlook.com  MarkerPlot No.188, HiRise PVR Meadows, Bachupally, Hyderabad | |
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**EDUCATION**

**BTech Artificial Intelligence & Data Science**

Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering &Technology, Hyderabad (*2021 – 2025)*

*CGPA: 8.19 / 10 (up to 4th semester)*

**11th and 12th Standard** (Vikas – The Concept School, Hyderabad)

*CGPA: 8.76 / 10 (CBSE)*

**11th and 12th Standard** (Vikas – The Concept School, Hyderabad)

*CGPA: 9.5 / 10 (CBSE)*

**PERSONAL PROJECTS**

**Full-Stack Book Data Management System**

The learning project is an interactive web application designed to enable **over 1000 users concurrently** to effortlessly manage and explore a vast collection of books saving library staff about **30+ hours** every week.

* Built using the MERN stack
  + Front-End: HTML, CSS, JavaScript, React.js
  + Back End: Node.js, Express.js
  + Database: MongoDB
* Responsive Intuitive User Interface with 2 choices of Card View and List View of Books available with **6 components** and

**5 webpages** overall

* Functionalities: Create, Edit, Delete, and View Details of a Book

**GROUP PROJECTS**

**Drowsiness Alerting System (2023 - Present)**

This machine learning project aims to enhance safety and prevent accidents caused by drowsy driving or operating machinery.

* Trained on about **4000+ image datapoints** it accurately detects whether a person is sleepy within **5-10 microseconds** and promptly alerts them to take corrective action with **87.9% accuracy**.

Video Input Processing | Transfer Learning | Customization

Drowsiness Detection Algorithm | Real-Time Analysis

* 3 Technologies used:
  + Machine Learning Framework: TensorFlow with Keras
  + Transfer Learning: Pre-trained CNN model (MobileNet)
  + Alert Mechanism: Audio and visual interfaces

**Traffic Data Analysis**

Analysed correlations **between 20+** location data attributes and their traffic density using advanced machine learning techniques on prepared data spanning **over 10 years.**

* Trained a multilinear regression model to detect location specific traffic patterns.
* Achieved **over 95%** precision in validating model accuracy, utilizing metrics like mean squared error.

**Skills used**

Data collection | Cleaning | Analysis | Visualization

**TECHNICAL SKILLS**

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| Data Structures & Algorithms |  |  | Databases |

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| MySQL |  | Excel |  | PowerPoint |  | Full Stack |

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| Machine Learning |  |  | Git & GitHub |  | Data Analytics |

**PROGRAMMING LANGUAGES**

* **PYTHON**

BASICS | NUMPY | PANDAS | TENSORFLOW DATA VISUALISATION WITH MATPLOTLIB & SEABORN |

* **JAVA**

BASICS | OBJECT ORIENTED PROGRAMMING

* **C**

BASICS | DATA STRUCTURES

**WEB DEVELOPMENT**

HTML5 | CSS | JAVASCRIPT | REACT.JS

**COURSES & CERTIFICATIONS**

Training on Advanced Programming Concepts

Machine Learning Specialization*(Online)*

by Stanford University & DeepLearning.AI on Coursera

*Total 3 Certificates earned by September 20, 2023 (Online)*

[*https://coursera.org/share/c7a8316c2613b5bc0fd4e91e3c4a248b*](https://coursera.org/share/c7a8316c2613b5bc0fd4e91e3c4a248b)

* Supervised Machine learning
* Advanced learning algorithms
* Unsupervised Machine learning

Cloud Computing Course Certificate (IIT Kharagpur)

Obtained 78% as Top 5% (Silver) out of 16686 students

offered by NPTEL (online with proctored examination)

IBM SkillsBuild Micro-Internship on Data Analytics

Completed a workload of 5 (1-2hr) certication courses and

a data analytics project within a span of 2 weeks

*Certificate by* IBM Skillsbuild, CSRBOX*(Online) on November 7, 2023*

**RESEARCH PROJECTS**

**Ray Tracing Literary Research** *for a college competition*

*(November 7, 2023)*

* Analyzed **30+ papers**, synthesizing key insights and trends in ray tracing methodologies from diverse sources, condensing information by **80%.**
* Evaluated **5+ ray tracing implementations** for strengths, weaknesses, and innovation opportunities. Identified potential future avenues for ray tracing advancements based on analyzed literature.

Research & Analysis | Technical Expertise | Communication Proficiency

**SPOKEN LANGUAGES** ENGLISH | TELUGU | HINDI