## CHEEDELLA SIVA SAI JAHNAVI



**LinkedIn:** http://linkedin.com/in/jahnavi-cheedella-299510264 **Portfolio:** https://jahnavicheedella.github.io/jahnavi-portfolio/

GitHub: https://github.com/JahnaviCheedella

As a **Frontend React Developer and Generative AI** enthusiast, I bring hands-on experience in building responsive, high-performance applications. I am skilled in creating engaging and consistent user interfaces optimized for cross-device performance using technologies such as **React.js**, **Next.js**, **Redux**(**RTK**), **TypeScript**, **JavaScript** (**ES6+**), **HTML5**, **CSS3**, and **REST APIs**. My expertise extends to the **full MERN stack**, including **Node.js**, **Express.js**, and **MongoDB**.

With a passion for intelligent automation, I leverage my skills as a **Generative AI** enthusiast to deliver innovative solutions. My expertise includes **Python, PyTorch, NLP, RAG** (**Retrieval-Augmented Generation**), **LangChain, and Prompt Engineering**, supported by foundation in **Pandas and NumPy** to build data-driven AI features.

#### **Technical Skills**

- **Frontend**: HTML5, CSS3, JavaScript (ES6+), TypeScript, React.js, Next.js, Redux(RTK), REST APIs (integration & consumption)
- Backend / Full Stack: Node.js, Express.js, MongoDB
- **AI/ML:** Python, NumPy, Pandas, PyTorch, NLP, Generative AI, RAG (Retrieval-Augmented Generation), Prompt & Context Engineering, LangChain
- Other Tools: GitHub, Linux, Label Studio
- Soft Skills: Analytical thinking, Problem-solving, Communication, Leadership

## Experience

## React & Generative AI Developer / TrueID, Hyderabad October 2024 – present

- Develop responsive, high-performance web applications using React, TypeScript, and Redux(RTK), ensuring clean architecture and accessibility.
- Implement Redux(RTK) for efficient state management and TypeScript for type-safe, maintainable code.
- Enhance UI/UX with modern design patterns, optimizing performance and adhering to accessibility best practices.
- Build intelligent automation workflows using Generative AI, NLP, and LangChain for context-aware solutions.
- Applied Prompt & Context Engineering to optimize AI interactions and enhance model understanding in automation projects.

### React JS Intern / TrueID, Hyderabad

#### **JULY 2024 – SEPTEMBER 2024**

- Built and optimized reusable UI components with React JS, focusing on responsive design and modern hooks.
- Integrated APIs and third-party libraries to enhance application functionality and performance.
- Collaborated in agile teams through code reviews and sprint planning, improving UI efficiency.
- Applied best practices for maintainable, accessible, and performance-optimized code.

## UI Developer Intern / BVM CS IT Services, Hyderabad JUNE 2024 – JULY 2024

- Created semantic HTML5 structures and responsive CSS3 layouts for pixel-perfect static websites.
- Applied mobile-first design, typography, and spacing to ensure cross-device compatibility.
- Mastered web development fundamentals, including box model, positioning, and media queries.
- Ensured accessibility and clean design through best practices in semantic markup.

## **Projects**

### **IDM Demos | Frontend**

#### Technologies: React.js

Contributed to the UI development of IDM demos, focusing on user-friendly, visually appealing interfaces and mobile responsive with real-time identity verification (auto document & face capture).

- Built interactive components like stepper, capture previews, progress indicators, and success dialogs.
- Developed a modern design system to ensure visual consistency and usability.
- Implemented **React ApexCharts** for dynamic data visualization.
- Designed responsive layouts for desktops, tablets, and mobile devices.

#### RAG Q&A Chatbot | Full Stack

Technologies: React.js, Python, Flask, LangChain, FAISS, HuggingFace

Built a **Retrieval-Augmented Generation (RAG) chatbot** that answers questions from external knowledge sources (e.g., Wikipedia, URLs, PDFs, databases). Integrated prompt engineering and external knowledge retrieval to ensure **accurate and up-to-date answers**.

- Developed a responsive chat UI in React, optimized for desktop and mobile devices.
- Flask backend APIs to serve LLM responses.
- Integrated LangChain + FAISS for document retrieval and semantic search.
- Applied HuggingFace models (Flan-T5 + Sentence Transformers) for embeddings and Q&A.
- Uses Prompt Engineering to ensure accurate, controlled, and non-hallucinated responses.

### **Clustering | Frontend**

Technologies: React.js, Redux(RTK)

Developed dynamic and interactive UI components using React and Redux(RTK), enabling seamless state management across the application. Focused on building reusable components and structured state logic to ensure scalability.

- Implemented Redux(RTK) for predictable data flow and structured state logic.
- Built modular, reusable UI components and interactive elements like expandable lists and filters.
- Integrated Material UI Skeleton loader for smooth loading transitions.

## **Acquiring | Frontend**

Technologies: React, Typescript, Redux(RTK)

Engineered robust UI components using React and TypeScript to improve reliability and maintainability of the frontend. Emphasized type safety and clear interfaces to prevent runtime errors and improve developer productivity. Leveraged Redux(RTK) for structured global state handling.

- Built modular components aligned with project standards and design system.
- Leveraged hooks, functional components, and context-driven state management.
- Applied TypeScript for strong typing and compile-time error prevention.

### **KYC Update Portal | Frontend**

Technologies: React.js, Redux(RTK)

Led UI enhancements and integrated new functionalities for the KYC update portal using React.js and Redux(RTK). Integrated auto document capture and auto face capture using Innovatrics. Improved performance and user satisfaction through optimized components and responsive layouts.

- Built modular components to streamline KYC processes and improve navigation.
- Integrated Innovatrics SDK for automatic document and face capture.
- Optimized components for performance and designed responsive layouts for all devices.

#### **TrueID Image Verification Portal | Frontend**

Technologies: React.js

Developed dynamic and interactive UI components for image verification with drag-and-drop upload and real-time API integration.

- Created preview-enabled image upload interface with feedback labels (AI-Generated/Real Image).
- Integrated real-time verification APIs to provide accurate results.
- Designed responsive layouts for seamless use across devices and screens.

## **Custom Object Training and Segmentation for Drone Imagery Using YOLO Model** | AI/ML

Technologies: Label Studio, E2ENetworks TIR, Python, YOLO

Trained YOLOv11x for object segmentation on drone imagery, focusing on buildings, roads, trees, pedestrians, vehicles, and urban features.

- Prepared annotated datasets with segmentation masks using Label Studio.
- Fine-tuned YOLOv11x on GPU servers for high-performance computation.
- Deployed trained model for accurate real-time aerial detection.

# Training and prediction of AI Deepfake Vs Real face image detection model | AI/ML

Technologies: Linux, Git Bash GUI, Python

Worked with a pre-trained Vision Transformer model to detect AI-generated images, deepfakes, morphs, swaps, and digitally injected faces.

- Trained and ran predictions on GPU servers for selected image datasets.
- Debugged and modified Python code to fix issues and ensure smooth execution.
- Leveraged Linux and GitBash for managing workflows and server operations.

### Sentiment Analysis Classifier for IMDb Movie Reviews | AI/ML

Technologies: Python, Pandas, PyTorch, NLP

Built an LSTM-based model to classify IMDb reviews as positive or negative with full preprocessing and embedding pipelines.

- Designed tokenization, vocabulary creation, sequence padding, and trainable embedding layers.
- Trained, validated, and evaluated the model achieving [Your Accuracy]% on the test set.
- Demonstrated end-to-end NLP capability from preprocessing to model deployment.

## E-Commerce web Application | Full Stack (MERN)

Technologies: React.js, Redux(RTK), Node.js, Express, MongoDB

Developed a full-stack e-commerce web application with secure authentication, product catalog, and cart functionality. Implemented responsive frontend with React and MUI, and backend APIs with Node.js, Express, and MongoDB for server-side logic and data persistence.

- Built mobile-first responsive UI with protected routes and Redux(RTK)-managed state for authentication, products, and cart.
- Implemented signup/signin flows with password hashing via bcrypt and route-based access control.
- Developed product catalog with search and category filters; integrated cart functionality (add, update, remove, clear) with server-backed totals.
- Created backend endpoints for product retrieval, cart management, and data initialization, ensuring secure and efficient database operations.

## **Education**

## Bachelor of Technology - 8.0/10.0 CGPA

Prakasam Engineering College, Dubagunta, Andhra Pradesh MAY 2024

## Intermediate (MPC) - 9.9/10.0 CGPA

Narayana Junior College, Kandukur, Andhra Pradesh MARCH 2020

SSC - 10.0/10.0 CGPA

SIDDHARTHA HIGH SCHOOL, KANDUKUR, ANDHRA PRADESH APRIL 2018