DIBYENDU BAR

FULL STACK SOFTWARE ENGINEER

Gujarat, India │ dibyendu@dotnitron.com

SUMMARY

A highly disciplined and sociable Full Stack Developer with a strong focus on delivering efficient, high-quality solutions. Thrives under pressure, excels in collaboration, and brings a detail-oriented, structured approach to development. Passionate about AI-driven innovation and building impactful digital experiences.

PROFESSIONAL EXPERIENCE

SDE (Full Stack), Dotnitron Technologies Private Limited   **Jan 2025 - Present**
- Developing Proof of Concepts (PoCs) for AI-driven agents and automation workflows.
- Contributing to the Meeting Notes App (Meet Plugin), integrating real-time transcription and structured output generation.
- Enhancing AI-driven features for context-aware meeting insights and structured documentation.

Full Stack Developer (MERN), HeyCoach   **Mar 2024 - May 2024**
- Integrated sales notifications to alert the team when targets like Complete Amount Paid (CAP) or Token Amount Paid (TAP) were met.
- Developed an end-to-end meeting scheduler by integrating Google Meet and Calendar APIs.
- Optimized performance by converting client-side pages to server-side rendered pages for improved speed and SEO.

Digital Specialist Engineer, Infosys   **Aug 2022 - Feb 2024**
- Developed AI-powered chatbots for a Big Four client using Azure Language Services, leveraging NLP and NER to enhance customer interactions and streamline query resolution.
- Built a Learning Management System (LMS) for educators to manage attendance, scheduling, and file sharing, using React.js, Node.js, Express.js, and MongoDB for a seamless experience.

PROJECTS

Voice Assistant using Realtime API and Twilio
Developed a robust voice assistant capable of interacting with users through real-time voice commands and responses. Integrated Realtime API for voice recognition and Twilio for telephony features such as call handling. The assistant enhances user engagement with seamless voice interactions.
Key Features: Real-time communication, speech recognition, and telephony integration.
Technologies: Node.js, Twilio API, WebSocket.

Image Generator Project
Created a generative AI application that transforms textual descriptions into detailed and visually realistic images. It leverages state-of-the-art machine learning models for image synthesis, catering to both creative and practical use cases.
Key Features: Text-to-image generation, pretrained model integration.
Technologies: Huggingface Transformers, PyTorch, OpenAI API.

GitHub Code Search Algorithm

Designed an application to search and retrieve specific code snippets from GitHub repositories based on keywords and functionality. This project uses AI to improve the efficiency of code retrieval, enhancing developer productivity.
Key Features: AI-powered search, natural language understanding, efficient code indexing.
Technologies: OpenAI API, Streamlit, Python.

Amazon Recommendation System Using Machine Learning

Built a recommendation system for personalized product suggestions using user behavior analysis. Implemented K-means clustering for user segmentation and collaborative filtering for accurate recommendations.
Key Features: Data-driven insights, user clustering, personalized suggestions.
Technologies: Python, K-means clustering, Pandas, NumPy, Matplotlib.

RAG AI Assistant (Retrieval-Augmented Generation)

Developed an intelligent assistant capable of processing PDF uploads, extracting text, and generating embeddings for efficient information retrieval. Integrated Hume AI for conversational capabilities and Cohere API for embeddings. The assistant supports interactive AI-driven document handling.
Key Features: PDF text processing, conversational AI, vector database integration.
Technologies: Node.js, Cohere API, Pinecone, Hume AI.

EDUCATION

Maharaja Surajmal Institute Of Technology   **2018 - 2022**
- Bachelor of Technology (B.Tech) in Computer Science Engineering
- CGPA: 8.547

K.V. NO.2 AFS Ambala Cantt   **2017 - 2018**
- Aggregate: 87.6%

K.V. AFS Wadsar   **2015-2016**
- CGPA: 9.4

SKILLS

- **Programming Languages:** Python, Javascript, C++, C#
- **Frameworks & Libraries:** FastAPI, Node.js, Express.js, React.js
- **Backend Technologies:** FastAPI, Node.js, Express.js
- **Databases:** MongoDB, MySQL, PostgreSQL
- **Software Development Concepts:** Data Structures & Algorithms, API Development, Scalable Architectures

ACHIEVEMENTS

- Solved 400+ problems on Leetcode.
- Earned 6 stars in Problem Solving on HackerRank.