

Bhanu Prasad Mantri

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🔧 Technical Skills

• Programming Languages:

- **Python:** Proficient in writing clean, scalable code for various automation, web development, and IoT-based applications.
- **Dart:** Specialized in cross-platform mobile app development using Flutter, focusing on optimizing performance and UI
- **JavaScript/TypeScript:** Skilled in building full-stack web applications, microservices, and real-time systems
- **Go:** Experience in building high-performance, concurrent services for backend development.
- **Java & Kotlin:** Experienced in Android app development, creating efficient and responsive mobile applications.
- **PHP:** Developed robust backends and RESTful APIs for web and mobile applications.

• App Development:

- **Flutter:** Experienced Flutter developer skilled in building cross-platform mobile apps with a focus on performance, UI/UX design, and seamless integration with backend services.

• Web Development

- **React.js:** Advanced skills in developing dynamic, responsive front-end applications with a focus on component-based architecture, state management, and API integration.
- **Node.js & Express.js:** Developed scalable backend solutions for RESTful APIs, microservices, and real-time applications with optimized performance.

• Cloud Technologies:

- **AWS (Amazon Web Services):** Experienced AWS developer with extensive hands-on expertise in a wide range of AWS services, including Lambda, DynamoDB, Kinesis, Athena, RDS, ECS.
- **GCP (Google Cloud Platform):** Hands-on experience building and deploying services on GCP, including Cloud Run, Cloud Functions, Pub/Sub, GKE, Cloud Storage, and BigQuery.

• AI / LLM Engineering:

- **LLM Application Development:** Built production features on top of large language models — prompt engineering, structured output, and evaluation pipelines for measuring and improving generation quality.
- **Speech & Audio AI:** Integrated speech-to-text and diarization into real-time transcription workflows for clinical documentation.
- **APIs & Tooling:** OpenAI and Anthropic APIs, function/tool calling, and streaming responses; building agentic workflows with Claude Skills and the Model Context Protocol (MCP).

• Web Frameworks & Libraries: React, NodeJS, NextJS, ExpressJS, NestJS, FastAPI, Django, Spring

• Databases: MySQL, Postgres, DynamoDB, MongoDB, SQLite

📁 Work Experience

📅 2024 – PRESENT 📍 Remote

Software Engineer @ Commure

Projects

- **Commure Ambient (iOS & Android):** Built and shipped features for the AI ambient clinical documentation app in Flutter, letting clinicians record patient encounters and receive AI-generated visit notes at the point of care.

Tech Stack: Flutter, Dart, NodeJS, Go, LLMs, AWS Cloud

- **Real-time audio capture & streaming:** Implemented resilient background audio recording, chunked upload, and reconnection handling so long encounters are transcribed reliably even on unstable networks.
- **Note review & editing experience:** Developed the note review and editing UI with section-level controls and clinician feedback capture used to evaluate and improve note-generation quality.
- **Backend micro-services:** Designed and maintained serverless services for audio ingestion, transcription orchestration, and note generation, wiring together LLM pipelines and speech-to-text providers.
- **EHR integration & note delivery:** Built APIs to sync patient and encounter context and push finalized notes into customer EHR systems, cutting manual documentation work for clinicians.

- **Reliability & observability:** Added structured logging, tracing, and alerting across the documentation pipeline, improving processing success rate and time-to-note.

📅 2022 – 2024 📍 Remote

Lead Software Engineer @ SourceFuse

Projects

- **Pentair Chatbot (Mobile App):** A chatbot developed in Flutter that helps customers and resolves queries regarding the device usage.
- **Led the development and deployment of IoT solutions for water management** leveraging AWS cloud technologies to enhance monitoring and control systems.
- **Designed and implemented scalable IoT architectures** using AWS services such as IoT Core, Lambda, and DynamoDB, ensuring efficient data collection and real-time analytics
- **Integrated sensors and devices** with AWS IoT services to track water levels, flow rates, and quality indicators, significantly improving data accuracy and operational efficiency.
- **Automated data processing workflows** using AWS Step Functions and AWS Glue, reducing manual intervention and accelerating data processing times.
- **Collaborated with cross-functional teams** to define project requirements and deliver innovative solutions that addressed key challenges in water resource management.
- **Micro-Services:** Developed micro-services for various IoT products using serverless.

📅 2018 – 2022 📍 Kondapur, Hyderabad

Lead Software Engineer @ Janaspandana

Projects

- **Anurag University:** A University management and learning management system. Provided end to end solution for the entire Anurag University which includes managing admissions, attendance, students performance, exams, library, clubs, fees and many others. Entire system has various web portals and mobile apps for daily use by university staff and students.

Tech Stack: Flutter, Typescript, NestJS, React, Redux, MySQL

- **IAE (Indian Aptitude Exam):** An online test platform with the user base of 10K+ people where the students and individuals can purchase tests, attempt tests and get the ranking, medal and certificate for the attempted test

Tech Stack: Flutter, Javascript, NodeJS, ExpressJS, React, Redux, MySQL

- **Docco (Telemedicine App):** Developed a video calling app for doctors and patients to schedule and conduct remote consultations

Tech Stack: Flutter, PHP, Laravel, Android, React

- **Drunken Monkey (Smoothie Bar POS):** Drunken Monkey is a chain of smoothie bars. Developed a POS (Point of Sale) & KOD (Kitchen Order Display System) which are being used by all the franchises in India.

Tech Stack: React/Redux, PHP, Magento, Elasticsearch

📅 2016 – 2018 📍 ECIL, Hyderabad

Software Engineer @ Powern Solutions

Projects

- **SCADA Systems:** Developed a web-based SCADA (Supervisory Control and Data Acquisition) system for the pharmaceutical industry, providing real-time monitoring and control of critical processes. The system features a centralized dashboard for tracking equipment performance and production metrics, ensuring compliance with industry standards. Its web-based design allows for remote access, improving operational efficiency and minimizing downtime.

Tech Stack: Javascript, NodeJS, ExpressJS, Socket.IO, AngularJS, Angular Material, Phaser Game Engine, MySQL

- **Ergomon:** Built an energy monitoring system for industrial usage, tracking energy consumption.

Tech Stack: PHP, CodeIgniter, MySQL, Javascript, Java, Python

🚀 Projects

- **Abacus (LearnClue):** The Abacus Game is an interactive, Flutter-based educational app designed to make learning the abacus fun and engaging for children. With multiple levels of increasing difficulty, the game guides players through the fundamentals of abacus calculations, helping to develop their mental math skills in an intuitive and playful environment. To motivate learners, the app features a dynamic leaderboard that fosters a sense of healthy competition among players, encouraging them to improve their scores and progress through the levels. The app's child-friendly design and educational focus make it an effective tool for learning while ensuring that children stay entertained and challenged. By combining education with gamification, the Abacus Game turns learning into an enjoyable experience for young minds.

Tech Stack: Flutter

- **Cyclops (Powern):** Cyclops is an innovative Flutter-based application designed for the steel industry, enabling seamless communication with pyrometers to monitor furnace temperatures and operational data in real-time. The app collects critical furnace data, such as temperature readings, and securely transfers it to the cloud for analysis and reporting.

Tech Stack: Flutter

- **Energy Meter Scanner (Amitech):** The Energy Meter Scanner is a cutting-edge Flutter application designed to streamline the process of collecting energy consumption data from meters across different vendors. By utilizing Bluetooth and wifi, the app automatically scans and collects data from nearby energy meters, eliminating the need for manual meter readings. Once collected, the data is securely transmitted to the cloud for centralized storage and analysis. This solution drastically improves efficiency by reducing the time and effort required for manual readings, while providing real-time access to accurate energy usage data. The app's cross-vendor compatibility ensures seamless integration, making it a versatile tool for energy management and monitoring at scale.

Tech Stack: Flutter

- **Home Automation System:** This comprehensive home automation solution combines a sleek Android mobile app with a Python-based server running on a Raspberry Pi, utilizing MQTT for real-time communication between devices. The mobile app allows users to easily manage and control various appliances—such as lights, fans, and other devices—right from their smartphones, offering convenience and modern home automation at their fingertips. MQTT ensures efficient, low-latency messaging between the app and the connected appliances, enabling seamless and reliable control.

Tech Stack: Android, Java, Python, MQTT

- **Kalendar (Flutter package):** A highly customizable and reusable calendar widget developed in Flutter, designed for seamless integration into any Flutter app, enabling event marking and calendar rendering.

Tech Stack: Flutter

Education

 2013 – 2016  NARAYANGUDA, HYDERABAD

Bachelor of Science in Electronics

HRD Degree and PG College