

Chetan Kumar Nageshwarrao Chitturi

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Skills

Languages: C/C++, Java, Python, JavaScript, TypeScript, SQL

Technologies & Tools: AWS, EC2, MongoDB, S3, Lambda, Elasticsearch, Kubernetes, Docker, Spring, Angular, ReactJS, NextJS, NodeJS, Acertinity UI, Generative AI, Prompt Engineering, Instruction Fine-Tuning, Streamlit, Adobe Experience Manager

Work Experience

ThinkLabs, Dublin, CA

Sep 2022 - Present

Software Engineer Intern

- Constructed dynamic web applications using Next.js, React.js, and Node.js, increasing UI responsiveness and user interaction by 30% with TailwindCSS and Acertinity UI.
- Directed Node.js backend development, improved state management, cut development cycles by 25%, and enhanced software quality through agile practices and continuous integration.
- Created a sophisticated chatbot using Cohere's LLMs, boosting customer satisfaction by 40%, halving response times, and drastically reducing support costs.

TATA Consultancy Services, Hyderabad, India

Aug 2020 - Jul 2022

Software Development Engineer

- Crafted and maintained client websites with Adobe Experience Manager and Spring Boot, boosting client involvement by 20% with personalized, scalable solutions.
- Built RESTful services in Spring Boot to augment Adobe Experience Manager interconnectivity and supported a robust microservices architecture; devised "Scheduler" automation tool, reducing manual production by 40%.
- Developed an RSS generator for multimedia integration into platforms like Spotify, enhancing content accessibility and audience reach; employed Adobe Target for advanced analytics, improving client connectivity by 30% with real-time personalizations.

TechieAid, Bangalore, India

May 2019 - Aug 2019

Data Science and Mobile Application Intern

- Formulated and executed Android apps with Android Studio and Java, enhancing functionality and data exchanges via RESTful API integration.
- Refined app performance across devices using Android Studio's debugging tools and Git for effective version control and team collaboration. Performed extensive testing with Android Emulator and Espresso to ensure app reliability.
- Evaluated and elevated housing price prediction algorithms using statistical tools and decision tree models, advancing model accuracy and decision-making efficiency for stakeholders.

Education

Binghamton University, State University of New York, Thomas J. Watson College of Engineering and Applied Science, Binghamton, United States

Aug 2022 - May 2024

Masters. in Computer Science

Visvesvaraya Technological University, Belagavi, India

Aug 2016 - Jun 2020

B.E. in Computer Science and Engineering

Project Work

- **Git-Bot (2024):** Designed an interactive chat application tailored for GIT documentation assistance, integrating Streamlit and PyPDF2 with cutting-edge AI methodologies including prompt engineering and Reinforcement Learning from Human Feedback (RLHF). Established a text retrieval system using LangChain, OpenAI Embeddings, and FAISS to optimize documentation analysis, and constructed a conversation management system utilizing Retrieval-Augmented Generation (RAG) to refine chatbot response accuracy and user feedback processes.
- **Multi-Modal Chat Application (2023):** Engineered a multimodal AI chat application incorporating Whisper AI, LLaVA, and Chroma DB for advanced audio, image, and PDF processing, significantly enhancing user experience and accessibility. Deployed quantized AI models optimized for consumer-grade hardware to ensure efficient multimedia processing, and integrated Whisper AI's voice-to-text transcription to boost application functionality and user interaction across diverse environments.
- **Audi Room as a Cloud Service (2023):** Directed the development of an audio room application using React.js, Spring Boot, and DynamoDB, creating a scalable and robust platform for dynamic content management. Implemented Amazon Fargate for automated server provisioning to augment operational costs and resource use, and utilized Amazon Load Balancer to upgrade application performance, scalability, and reliability through effective load management.
- **Flight Data Analysis Using Mongodb (2022):** Utilized MongoDB's aggregation framework to analyze domestic flight data, pinpointing optimal travel times to minimize delays and enrich schedule efficiency. Employed the D3 JavaScript library for creating clear, intuitive visualizations of complex data, enabling informed decision-making, and synthesized strategic recommendations to amplify flight scheduling and reliability.
- **Classifying Clinically Actionable Genetic Mutation Based on Clinical Evidence (2020):** Orchestrated an innovative machine learning model to pinpoint high-risk cancer patients, streamlining personalized treatment plans and reducing pathologists' workload. Enhanced predictive accuracy from 64% to 67% by refining various algorithms through ensemble learning techniques and improved dataset processing with one-hot encoding and TF-IDF for feature extraction.

Awards and Certificates

- "On the Spot Award", TATA Consultancy Services : Awarded for demonstrating high performance
- "Applause for Team Award", TATA Consultancy Services: Awarded for proactive participation in the team
- Generative AI Engineering Accreditation issued by **Databricks**
- Adobe Experience Manager Front-End Developer issued by **Adobe**