Sri Sai Surya Abhinav Chavatapalli

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WORK EXPERIENCE

Accenture Japan Ltd | Tokyo, Japan   May 2022 - Present

Senior Software Analyst

- **Modernization of Legacy Systems | Insurance Client**: Senior Application Developer | Team Lead
  - **Led a team** in modernizing legacy systems, focusing on optimizing job execution patterns to meet strict operational timelines.
  - **Developed Python-based apps** for data analysis, report generation, and integration of data channels, reducing manual efforts by **80%**
  - Designed and implemented **React-Python application** to visualize complex job dependency networks, improving operational insights.
  - Created utilities to **analyze Assembly and COBOL code**, identifying packed and zoned decimals, to enhance migration accuracy.
  - Contributed to performance optimization testing, identifying and resolving bottlenecks execution flow, achieving **30% efficiency gains**.
- **Internal GenAI Innovations**: Full-stack Developer
  - **Developed GenAI-powered meeting assistant** application, automating minutes, summaries, improving meeting **efficiency by 15**%
  - Task assignments, JIRA ticket generation, and streamlined action item tracking to reduce post-meeting administrative overhead by **20%.**
  - **Supervised the development** of learning application for lectures enabling automated quiz generation and content summarization.
  - **Improved user engagement by 10%** through personalized learning experiences, lecture notes and reports suggesting relevant lectures.

Software Analyst

- **Data Pipeline and Analytics Reporting | E-Commerce Client**: Application Developer
  - Implemented a **data pipeline** to process QSPD data doing an ETL from an SQL server, onto **AWS cloud platform** for report generation.
  - **Distributed workloads on AWS**, through concurrent or distributed computing techniques, improving report generation tasks by 40%
  - Enabled client to access **interactive dashboards and analytics** derived from QSPD data, enhancing data-driven decision-making.
- **E-Commerce Website Development | E-Commerce Client**: Frontend Developer
  - Built responsive web pages for an e-commerce platform using **VueJS and Tailwind CSS**, ensuring a seamless experience across devices.

PROJECTS

- **TreeViz Application**: Dependency Visualization Application
  - Designed and developed a JCL dependency visualization application using DFS and PyVis, enabling analysis of **25,000+ job networks**.
  - **Reduced batch processing time by 10%** by identifying parallel execution opportunities, improving resource utilization on OF systems.
  - Built a **scalable architecture** to handle large datasets and complex dependency graphs, ensuring high performance and responsiveness.
  - Working on **impact analysis** for failed jobs, and automated **critical path** identification, to further extend the application's capabilities.
  - **TechStack:** React, Tailwind, FastAPI, Python, PyVis, Docker
- **Incognito Chat**: Private AI Chatbot
  - Designed and Developed a Generative AI application with a **SwiftUI** frontend and **Python** backend, using a **self-hosted local LLM**.
  - Implemented a **self-hosted VPN** using **WireGuard**, securely exposing APIs and enabling private communication between devices.
  - Enhanced functionality with real-time data fetching and context-aware responses, achieving seamless conversational memory retention.
  - Secured communication protocols across devices using **VPN tunneling**, **JWT-based authentication**, and **encrypted WebSockets**.
  - **TechStack:** SwiftUI, Python, FastAPI, WireGuard, WebSockets, JWT, BeautifulSoup, Requests.

SKILLS

- **Frontend**: React.js, Vue.js, ReactNative, SwiftUI   **Backend**: FastAPI, Express.js, Node.js, Django   **ML**: TensorFlow, PyTorch, Keras
- **Frameworks**: Ollama, Transformers (HuggingFace), LangChain   **Databases**: PostgreSQL, MongoDB, SQLite, MySQL, Redis
- **Programming Languages**: Python, Java, Go, C/C+, JavaScript, SQL, Swift, Assembly, COBOL, JCL
- **Cloud/DevOps**: AWS, Docker, Git, CI/CD (Gitlab, GH actions), Agile & Waterfall   **Certifications**: Azure AI Engineer Associate
- **Spoken Languages**: English, Japanese (N3 certified), Hindi, Telugu

EDUCATION

Graduation	Program	Institute	CGPA/Marks
2021	Dual Degree(BTech+MTech in Mech)	Indian Institute of Technology, Kharagpur	7.35/10