

Arnav Panigrahi

+1 951-347-2065 arnav.panigrahi@gmail.com Riverside, US
[in](#) Arnav Panigrahi [notquitethereyet](#)

Experience

AllCheer, San Francisco, California

Software Developer

Jun 2024 - Present

- Reengineered an enterprise Release of Information (ROI) system from a manual process to fully automate the legal document workflow by streamlining the system with an AI Agent, resulting in **\$20K annual savings** and **60% less processing time**.
- Developed an internal dashboard for 20 therapists, combining a REST API CRM to manage schedules and track therapy progress with a full-stack timesheet app (React, Tailwind CSS, Python). Integrated a GPT-powered API to structure unformatted input using custom prompts, resulting in **35%** higher performance compliance and **92%** NLP accuracy.
- Built and deployed a FastAPI backend to ingest real-time Rethink BH data by emulating secure user dashboard access, replacing a 24–48h latency data warehouse pipeline. Deployed on Google Cloud Platform with observability stack; reduced latency to near real-time and saved **over 90% in costs**.

Pinnacle Consulting LLC (PCON Utilities Pvt Ltd), Bhubaneswar, Odisha

Junior Software Developer

Jan 2022 – Aug 2023

- Integrated ArcGIS-based mapping solutions for a utility provider in North Carolina (\$75M/year revenue) to visualize electric pole installation and sync updates from field workers' mobile apps; reduced oversight error rate by **30%**.
- Built and deployed 3 client ERPs using Angular, Node.js, and .NET to track employee timesheets, bug reports, and KPIs; implemented JWT authentication, invoice generation, and messaging; improved on-time delivery rates by **25%**.
- Engineered a Python backend to automate synchronization of client records, GIS layers, and system logs using cron and event-based triggers; completely eliminated data inaccuracy from manual processing.

Technical Skills

- **Backend Development & Infrastructure:** Python, FastAPI, Flask, Node.js, Express.js, Docker, Kubernetes, RESTful APIs, PostgreSQL, MongoDB, MySQL, Redis, Google Cloud Platform (GCP), AWS, Azure, CI/CD, Git
- **Frontend Development & UI Engineering:** JavaScript, TypeScript, React.js, Angular, Tailwind CSS, HTML, CSS, WCAG Accessibility
- **Machine Learning & Data Engineering:** Python, PyTorch, TensorFlow, Scikit-learn, NumPy, Pandas, LangChain, LLMs, RAG, Vector Search (Pinecone), Data Visualization, Statistical Analysis
- **Software Engineering Practices:** Agile Methodology, Object-Oriented Design (OOP), Test-Driven Development (TDD), System Architecture, Performance Optimization, Secure Coding Practices

Projects

- **bedtime.ai – Multi-Modal AI Storytelling Platform**
Developed an AI system that transforms children's drawings into personalized bedtime stories narrated in parents' voices. Integrated fine-tuned phi-3 LLM with computer vision (EfficientNet) and voice cloning for 30-second story generation. Built with React/Vite frontend, FastAPI backend, and containerized with Docker.
- **Rethink BH Automation – FastAPI + Cloud Run Backend**
Built a production FastAPI service to sync real-time appointment and authorization data from Rethink BH to Supabase by emulating secure user login, achieving **90% cost savings** and reducing sync latency from 24–48h to real time. Deployed with Docker, Secret Manager, and full observability stack.
- **RAG for Document Intelligence**
Engineered a Retrieval-Augmented Generation system enabling semantic search across PDF datasets. Combined Pinecone for vector storage with Groq for inference, achieving **35% improved search relevance** while maintaining sub-second response times. Implemented custom chunking strategies and comprehensive error handling.

Education

University of California, Riverside

Master of Science in Computer Science

2023 - 2025