SWAROOP CHAND J C

AI PLATFORM & AGENT SYSTEMS ENGINEER

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SUMMARY

AI platform and machine learning engineer with 2+ years of experience building enterprise RAG, agent systems, knowledge-ingestion pipelines, and cloud-native ML services. At ResMed, contributed to a self-service platform used to create 150+ assistants, including 2 customer-facing deployments and 10+ active internal bots, reducing end-user deployment time from weeks to minutes.

CORE SKILLS

RAG & Agents: Hybrid Search, Semantic Chunking, Reranking, Agent Registry, MCP, LLMOps, LangGraph, AI Evaluation | **Engineering:** Python, FastAPI, Microservices, Docker, Kubernetes, AWS Bedrock, S3, PostgreSQL/pgvector, OpenSearch, Redis, GitHub Actions | **ML:** PyTorch, TensorFlow, Transformers, CNNs, RNNs, XGBoost, H2O AutoML

EXPERIENCE

RESMED INDIA | Bengaluru, India **Jun 2025 - Present**

Associate Machine Learning Engineer - AI Platform & Agent Systems **May 2026 - Present**

- Implemented Agent Hub and AWS AgentCore-backed lifecycle flows for registering, discovering, updating, retiring, and routing independently deployed agents through a unified execution layer.
- Built a standalone FastAPI/ReAct web-research agent with SSE traces and API-key authentication; diagnosed cluster-egress blocking and added a three-backend fallback that restored grounded, source-cited responses.
- Developed a BMAD-based multi-agent pilot for SDLC and incident RCA, and consolidated approximately 14 onboarding capabilities into a unified FastAPI backend validated across production user workflows.

Data Scientist - Enterprise RAG & Knowledge Platforms **Jun 2025 - May 2026**

- Built and hardened core components of a self-service enterprise RAG platform used to create 150+ assistants, including 2 customer-facing deployments and 10+ active internal bots; reduced end-user deployment time from weeks to minutes.
- Engineered hybrid retrieval, semantic chunking, reranking, per-source Top-K controls, metadata filtering, and multimodal ingestion across Confluence, SharePoint, GitHub, Workday, PDFs, tables, images, and videos.
- Reduced PDF onboarding time by 31-40% through bounded parallel processing and embedding-pipeline optimization; built an OAuth2 Workday connector for approximately 1,145 articles with incremental sync and stale-record deletion.
- Delivered GitHub/Confluence ingestion, source traceability, deletion propagation, and a human-in-the-loop FAQ approval workflow with S3 persistence, automatic re-embedding, OpenSearch updates, and nonproduction hardening.

WATTWORKER INC. | Machine Learning Research and Developer **2023 - 2024**

- Developed RNN, CNN, XGBoost, Random Forest, and H2O AutoML models for HVAC forecasting using sensor data from 3 UK/US commercial buildings; improved reported model performance from 78% to 94%.
- Built physics-informed thermodynamic models and supervised-learning models for EV battery remaining useful life, range prediction, and GPS-based route/trip analysis.

EDUCATION

M.Eng., Artificial Intelligence and Machine Learning - MAHE | CGPA: 9.08 **2026**

Bachelor of Engineering - Sapthagiri College of Engineering **2023**