ARVIND GURUPRASAD

Stockholm, Sweden

Education

Karolinska Institutet, KTH Institute of Technology, Stockholm University

Master of Science in Biostatistics and Data Science (Joint Program)

Storing

Stockholm, Sweden

Aug. 2024 - Present

BMS College of Engineering

Sep. 2016 – Aug. 2020

Bachelor of Engineering in Computer Science and Engineering

Bangalore, India

Experience

Karolinska Institutet March 2025 – Present

Research Assistant

Stockholm, Sweden

- Initiated research and design for an LLM-based solution utilizing Retrieval-Augmented Generation (RAG) to parse unstructured prescription data.
- Led the architectural definition for an automated prescription parsing pipeline, specifying component responsibilities, data flow, and integration points for LLM/RAG modules.

Quantiphi Sep. 2022 – Aug 2024

Senior Data & AI Solutions Consultant - Healthcare

Bangalore, India

- Spearheaded deliveries for multiple healthcare ML engagements, orchestrating 20+ platform engineers, data scientists, and data engineers to achieve \$5M+ in contract value.
- Developed an LSTM-based nurse-staffing forecast model on 550M+ records, cutting overstaffing expenses by 40% and realizing \$1M+ in annual savings.
- Implemented an LLM-based whistle2 generator (RAG + Gemini models) to automatically map EHR data to FHIR, boosting accuracy to 95% and halving manual coding time.
- Led presales and GTM efforts across US, EU, and APAC, securing 10+ large-scale deals totalling \$15M+ by demoing tailored AI/ML solutions and aligning them with client needs.
- Coordinated cloud infrastructure and data pipelines (Python, SQL, Dataflow, Looker) for large-scale patient data integrations, reducing time to analytics by 30%.

Quantiphi Sep. 2020 – Aug. 2022

Data & AI Solutions Consultant

Bangalore, India

- Led R&D efforts for a pre-alpha, cloud-based healthcare solution, integrating stakeholder requirements from clinicians and nurses into clear engineering user stories.
- Built interactive dashboards in Looker and BigQuery for 500K+ records, improving health equity tracking and slashing manual reporting time by 40%.
- Reduced managerial overhead by 8+ hours/month through automated leadership workflows using Google App Scripts, fast-tracking decision cycles.
- Integrated SDOH and CDC SVI data into advanced risk models, identifying high-risk patients 15% earlier, enabling proactive care.
- Collaborated on a Healthcare NLP pipeline to parse unstructured EHR text, cutting chart review hours and expediting clinical insights.

Projects

Whistle Code Generator | LLM, RAG, COT and Few-shot Prompting, BigQuery, GCS

July 2024

- Engineered a RAG-based pipeline and Gemini model to automatically map EHR data elements to FHIR resources, cutting manual coding by 50%.
- Employed Chain of Thought and HITL validation, boosting data-mapping accuracy to 95% for reliable patient records.
- Developed a two-step "Column to FHIR" and "Whistle Code" generator, cutting integration times from days to hours.

Nurse Staffing Prediction | Google Cloud, Time-Series Models, BigQuery, Cloud Functions

January 2022

- Trained an LSTM-based model on 550M+ historical records, predicting nurse workload demands with 95% accuracy.
- Deployed pipelines in Vertex AI, reducing overstaffing costs by 40% & achieving an estimated \$1M+ in annual savings.
- Collaborated with data engineers and platform teams to harmonize 70M+ HL7v2 messages into FHIR for real-time insights.

Technical Skills & Certifications

Programming & Analytics: Python, R, SQL, Scikit-learn, TensorFlow, XGBoost, Pandas, NumPy, Looker (LookML) Cloud & Data Engineering: Vertex AI, Dataflow, BigQuery, Pub/Sub, Cloud Storage, Cloud Functions, Git, CI/CD Healthcare Data & Interoperability: HL7v2, FHIR, DICOM, ICD-10, HIPAA, PHI handling, Data Governance Certifications: Google Cloud Associate Cloud Engineer, Professional Scrum Master