dirtha Borgohain

🌙 91-8723912165 🛮 adirthaborgohain@gmail.com 🔚 linkedin.com/in/adirtha-borgohain 👩 github.com/AdirthaBorgohain

Experience

Aqxle AI Research Engineer Bengaluru, India/Remote

Aug 2025 - Present

• Building AI Agents for the marketing flywheel that helps marketers & marketing/media researchers get from data to insights very quickly, using a patent-pending approach to taxonomy normalization.

VedTechBio

Bengaluru, India/Remote

Manager - Data Science & AI Applications

July 2023 - Aug 2025

- Responsible for the development and delivery of VedTechBio's Generative AI platform for drug research & discovery, RxAgentAI. Features like Report Generation, AI Researcher are integrated into the platform that enhance drug research pipeline in terms of speed & efficiency.
- Developed Autonomous AI Agents using reasoning based LLMs to handle domain-specific tasks in the drug development pipeline leveraging multi-agent frameworks like PydanticAI, Langgraph, Agno, etc.
- Built and scaled an AI-powered analytics platform that delivers instant insights and actionable intelligence by connecting related research papers, extracting key data, and streamlining analytical workflows for big pharma companies, leveraging a database of 200M+ papers, 50M+ Open Access PDFs, and 100+ public data sources.

Alphameld

Guilford, USA/Remote

Senior Data Scientist March 2022 - July 2023

- Built a Entity & Relation Extraction pipeline with Entity Linking for Alphameld's proprietary AI platform to extract biomedical entities from texts, disambiguate them to their normalized forms & assign relations between them. This improved prediction accuracy by >25% in comparison to previous rule-based implementations.
- Led the development of ChatAlphaMeld, a biomedical chat multi-agent tool with web access leveraging LLMs with chain-of-thought (CoT) reasoning to decompose user queries and structure plans. It uses Retrieval Augmented Generation (RAG) to provide accurate, well-informed responses, streamlining the research process for drug researchers and reducing hypothesis generation time by over 4x.
- Developed AlphaClinMeld, a proprietary clinical trial design platform leveraging state-of-the-art LLMs, enhanced with a human-in-the-loop feedback system to ensure precise alignment with user requirements. Seamlessly integrated with Chainlit for a superior UI experience, markedly elevating trial design efficiency & speed.

Netenrich Bengaluru, India

Data Science Analyst (prev. Intern)

Feb 2020 - March 2022

- Deployed text classification models using word & character embedding methods: chars2vec, AlBERT to filter out piracy-related text content from curated articles for a cyber-intelligence news platform, **KNOW** (know.netenrich.com). Designed the **clustering algorithm** for clustering similar news articles in the platform.
- Built NLP based multi-task regression & classification solutions to improve efficiency & reduce manual overload in SLA response times for incoming issues & tickets
- Built Named Entity Recognition Models (NER) using BERT & Attention based deep learning architecture for detection of cyber threat entities in raw text sources, improving the accuracy & efficiency of the task from the previous implementation of rule-based models by more than 2x.
- Designed a probabilistic graph-based **Bayesian network architecture** to determine the root causes behind a failure or an issue. This resulted in speeding up the root cause analysis process from hours to minutes.

Technical Skills

Languages: Python, C, C++, SQL, HTML/CSS

Tools/Frameworks: Git, Tensorflow, Keras, spacy, Docker, Kafka, RabbitMQ, ElasticSearch, transformers, Redis, FastAPI, Postgres, langchain, langgraph, llama-index, pydanticAI, Ollama, Agno

Personal Projects

reportAI | langchain, pyppeteer

• A python-based tool that generates comprehensive PDF research reports from conversational text using Generative AI

intelliweb-GPT | langchain, llama-index, trafilatura, transformers

• Intelligent search engine/QA module that uses **GPT** models to provide accurate, relevant & recent answers from Google News/Web, & can also directly answer user queries using GPT's training knowledge.

Education

2016 - 2020Tezpur University