SABITHA PAULRAJ

📞 +91 9445413556   ✉ sabithaapaulraj@gmail.com   in linkedin.com/in/sabithapaulraj   github.com/sabithapaulraj

🌐 sabithapaulraj.netlify.app

Education

Saveetha Engineering College   **Nov. 2022 – May 2026**
B.E Computer Science and Engineering | CGPA: 9.2   *Chennai, TN*
Relevant Coursework: Data Structures and Algorithms, Operating Systems, Database Management Systems, Computer Networks, Software Engineering, Object Oriented Programming, Full Stack Web Development using MERN, Applied Natural Language Processing.

The Velammal International School(Higher Secondary), Grade: 95.6%   **Chennai, 2022**

Velammal Vidhyashram(High School), Grade: 96.2%   **Chennai, 2020**

Work Experience

BMW Group, India   **Oct 2024 – Mar 2025**
Data Analyst Intern   *Mahendra WC, TN*

- Automated backend workflows processing over 1M records using Python, SQL, and VBA, reducing manual workload and latency by 60%.
- Optimized RDBMS via query tuning and schema design, improving retrieval speed and data accuracy.
- Designed and deployed internal tools and dashboards used by teams across 6+ BMW plants worldwide (e.g, Thailand, Brazil, Egypt, Indonesia, Malaysia, Vietnam), boosting project tracking, compliance, and collaboration.
- Built custom features for production progress tracking, developed anAI powered Document Versioning tool saving 10+ hrs of manual documenting, collaborated with global stakeholders to deliver scalable tools across departments.

Projects

AlphaGraph | *React.js, SpringBoot, FastAPI, MongoDB, NLP based AI Pipeline*

- Built a dashboard for financial news analytics with an AI pipeline that orchestrates summarization, sentiment analysis, entity recognition, and stock impact scoring from live articles ,social media and and third-party APIs (Alpha Vantage, Finnhub) using NLP.
- Built front-end in React.js with Tailwind CSS, featuring company sentiments, trend analytics, and manual article analysis tools.
- Integrated backend with FastAPI, MongoDB, and third-party APIs (Alpha Vantage, Finnhub) for storage, stock data, and scalable AI processing.

JusticeBot | *RAG, FAISS, Gemini Pro, LangChain, Vercel*

- Built a RAG-based legal assistant using LangChain to deliver context-aware, citation-backed legal responses powered by Google's Gemini Pro model.
- Parsed legal PDFs and unstructured text using PyMuPDF and custom extractors to build a structured knowledge base embedded into a FAISS vector database for fast, semantic retrieval.
- Deployed on Vercel using a modular, serverless setup for scalable, low-latency legal query resolution.

Technical Skills

Programming Languages: Java, Python, C, JavaScript, TypeScript, SQL, C++, HTML5, CSS3.

AI/ML: Deep Learning, Neural Networks, Natural Language Processing, Transformers, Generative AI, LLMs, RAG, LangChain, PyTorch, TensorFlow, Prompt Engineering.

Full-Stack Development: React.js, Next.js, Node.js, Express.js, Flask, Spring Boot, MySQL, MongoDB, SQLite, PostgreSQL, RESTful APIs.

Tools: AWS, Google Cloud Platform, Azure, Git, GitHub, VS Code, IntelliJ, Jupyter Notebook, Google Colab.

Achievements & Positions of Responsibility

- **1st Place – IBM Z Datathon Global Hackathon (Chennai, In-Person), 2023**
- **1st Place – Datatrix 24hr Datathon at Guvi (SRMIST), 2024**
- **Joint Secretary - Machine Learning Community, Tech Society, 2024 - Present**
- **Coordinator, Math Club, 2023 - 2024**