





Ash.

 Ash Coder  binaryash  binaryash.github.io  binaryash@hotmail.com

Full Stack Web Developer — Data Scientist — Embedded Systems Engineer

EDUCATION

Bachelors in Computer Science Engineering

Courses: Object-Oriented Programming, Data Structures & Algorithms, Operating Systems, Computer Networks, Compiler Designs, Machine Learning, Data Science, Artificial Intelligence, Deep Learning

SKILLS

Languages: Python, JavaScript, SQL, C, C++

Frontend: React.js, Next.js, HTML, CSS, Tailwind CSS, Bootstrap

Backend: Django, Flask, FastAPI, Node.js, Express.js, Django REST, GraphQL, Firebase, Passport.js, Celery, Redis, Selenium

Tools: Git/GitHub(CI/CD), Postman, VSCode, Vim, Emacs, Azure, Google Cloud, Linux

Databases & Libraries: MongoDB, Mongoose, PostgreSQL, MySQL, FAISS

Data Science: Pandas, NumPy, Matplotlib, Plotly, Scikit-Learn, Tensorflow, RAG, Llama, Gemma, BeRT, Sentence Transformers, GPT-2

PROJECTS

College Management System | *Django, React.js, Python*

[GitHub](#) | [Demo](#)

- Developed a College Management System for students and faculty with features for managing attendance, grades, and scheduling.
- Implemented a robust back-end with Django and Python for handling user authentication, scheduling, and data storage.

Real-Time Chat Application | *Django, Django Channels, WebSockets*

[GitHub](#)

- Built a real-time chat application using WebSockets and Django Channels, enabling instantaneous message exchange.
- Ensured high availability and low latency for messaging, optimizing user engagement and experience.

Event Management Application | *MERN Stack, MongoDB, Express.js, React.js, Node.js*

[GitHub](#)

- Developed an event management app for creating and organizing events with a scalable MERN stack back-end.
- Implemented real-time updates for events and RSVP status using WebSockets, enhancing user experience.
- Added a notification system that alerts users when an event is scheduled for the current day, ensuring timely reminders.

RAG Application | *MiniLM, BERT, FAISS, SQLite, Google Gemini, GPT-2*

[GitHub](#)

- Developed a RAG application utilizing MiniLM for encoding data and distilled BERT for PDF data retrieval, reducing data processing time by 40%.
- Integrated FAISS and SQLite for efficient vector database management, increasing search performance speed by 50%.
- Incorporated GPT-2 and PDF conversion techniques, improving data retrieval accuracy and generating relevant text with a 30% higher precision.

Movie Recommendation System | *Neural Networks, Hybrid Filtering*

[GitHub](#)

- Developed a personalized movie recommendation system using neural networks and hybrid filtering techniques.
- Improved system accuracy by 20% through collaborative and content-based filtering.

Invoice Generator | *React.js, Vite, Ant Design*

[GitHub](#) | [Demo](#)

- Developed an intuitive invoice generator app with customizable export options in multiple formats.
- Enhanced development speed by 30% using Vite for fast builds and Ant Design for UI components.

Asynchronous Task Manager | *Celery, Redis, Django*

[GitHub](#)

- Built an asynchronous task manager with Django, Celery, and Redis for efficient task scheduling and execution.
- Designed a scalable architecture for handling large volumes of background tasks without performance loss.