Alan Derwin A

+91-7353760263 | alandervin29@gmail.com | LinkedIn | GitHub| Portfolio

Education

St Joseph's University — Bangalore, Karnataka
Master of Science: Computer Science — *Aug. 2022 – Present*

St Joseph's College (Autonomous) — Bangalore, Karnataka
Bachelor of Science: Mathematics, Electronics, and Computer Science — *Aug. 2019 – Aug. 2022*

COURSEWORK / SKILLS

- DSA
- Oops Concepts
- System Design
- Software Engineering
- Operating Systems
- Computer Networks
- Cloud Computing
- DBMS

Projects

LiveDocx: Collaborative Document Editor | ***Next.js, TypeScript, Liveblocks, Tailwind CSS*** Link

- Implemented user authentication using GitHub via NextAuth, ensuring secure sign-in/out and session management.
- Developed a collaborative text editor enabling multiple users to edit documents simultaneously with real-time updates.
- Designed document management features, including creating, deleting, sharing documents with permissions, and listing all owned or shared documents with search and sorting functionalities.
- Integrated inline and general comment systems with threading for discussions, enhancing collaboration.
- Displayed real-time presence indicators for active collaborators within the text editor, enhancing user awareness.
- Ensured a responsive design across all devices, providing a seamless user experience.

AI Content Generator | ***Next.js, TypeScript, PostgreSQL, Clerk , Drizzle ORM*** Link

- Developed an AI content generation application using Next.js and TypeScript for the frontend.
- Integrated Gemini API to generate content based on user-selected templates and topics.
- Displayed generated content in an editor panel with real-time updates for a seamless user experience.
- Stored all generated content in a PostgreSQL database using Drizzle ORM for efficient data management.
- Implemented a history page to display users' activity, including previously generated content, with options to delete and copy content.

Research

Comparative Analysis of User-User Collaborative Filtering Approaches — June 2023 – Nov 2023

- Conducted in-depth research on "Comparative Analysis of User-User Collaborative Filtering Approaches in Music Recommendation System," evaluating five collaborative filtering models.
- Explored and compared models like Pearson correlation, cosine similarity, adjusted cosine similarity, slope one, and SVD, providing a comprehensive understanding of their strengths and weaknesses in music recommendation.
- Employed precision, recall, F1 score, and RSME to systematically assess and compare collaborative filtering models, ensuring a thorough and nuanced analysis.

Technical Skills

Languages: Java, JavaScript, Typescript, HTML/CSS, MySQL
Frameworks: React.js, Next.js, Node.js, Express, Material-UI, Tailwind CSS, Vite, Bootstrap
Developer Tools: Git, AWS, VS Code, Visual Studio, Pycharm, IntelliJ, Eclipse
Libraries: React, react-router-dom,Daisy UI

Certifications

Web Development Bootcamp: by Dr. Angela Yu
The Agile Certified Practitioner Training Program: by Sorin Dumitrascu
AWS Academy Graduate - AWS Academy Cloud Foundations: AWS Academy