Alan Derwin A

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

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

Railway Reservation Management Website | *React.js, Node.js, Express, MySQL* — July 2023 - Nov 23

- Developed a comprehensive railway reservation system with React JS (frontend), Node JS, and Express (backend), backed by MySQL for efficient database management.
- Designed an intuitive booking form, integrating Razorpay test API for secure payment simulation, and stored booking details in MySQL upon successful transactions.
- Implemented PNR status functionality, enabling users to check, view, and cancel tickets seamlessly while ensuring real-time updates through efficient database interactions.
- Created a dynamic module for real-time train tracking, utilizing user-entered train IDs and database queries to provide accurate information on intermediate stops, arrival, and departure timings.

MERN Stack Blog Website | ***MongoDB, Express.js, React.js, Node.js*** — Aug 2023 - Nov 2023

- Developed a dynamic blog website with React JS (frontend), Node JS, and Express (backend), backed by MongoDB for efficient database management
- Implemented secure user authentication using JWT, Cookie Parser, and Bcrypt for robust login and registration functionality.
- Designed an editor form enabling users to create posts with titles, summaries, images, and content. Stored post data in the database upon creation for seamless content management.
- Enabled users to select and modify posts, improving the platform's flexibility. Implemented backend logic to support post updates for an intuitive editing experience.

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, Python, JavaScript, HTML/CSS, MySQL
Frameworks: React.js, Node.js, Express, Material-UI,Tailwind CSS,Vite, Bootstrap
Developer Tools: Git, AWS, VS Code, Visual Studio, Pycharm, IntelliJ, Eclipse,Android Studio
Libraries: React, react-router-dom, pandas, Numpy, sckit-learn,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