Alan Chris Antony

Python Developer

Portfolio | Linkedin | Github | Leetcode

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Profile Summery

Autodidactic **Python** developer skilled in **React** and **Django**, with strong hands-on experience in prototyping technical solutions. Committed to innovation, **adaptability** and **continuous learning** in dynamic environments.

Main Projects

Broccoli
Git | **Live**

E-commerce Application — *Django, PostgreSQL*

- **E-commerce Platform:** Developed "Broccoli," a scalable grocery platform using Python, Django, and PostgreSQL, deployed on AWS EC2 for high availability and load balancing.
- **User Authentication & Session Management:** Implemented secure email-based login, password recovery, and session-based cart/wishlist for both registered and guest users using Django Allauth.
- **Payment & Transaction Handling:** Integrated PayPal, a custom wallet system, and Cash on Delivery (COD) with asynchronous transaction processing and real-time stock validation.
- **Order Management:** Designed a complete order lifecycle system with tracking, cancellation, and detailed order histories, dynamically updated through asynchronous processing.
- **Admin Dashboard:** Built a comprehensive admin panel for managing products, orders, users, coupons, discounts, and categories.
- **Performance & Security:** Optimized performance with Redis caching, Cloudinary for media handling, and secured the platform with CSRF tokens, PBKDF2 hashing, and HTTPS encryption via certbot SSL.

FaceX
Git | **Live**

Resume Builder — *React, Django*

- **Platform Architecture:** Built using using React for the frontend, Django with the Django REST Framework for building scalable APIs, and PostgreSQL for managing relational data models such as user accounts and resumes.
- **Authentication & Authorization:** Integrated Clark API to manage OAuth-based user authentication, supporting secure login via email, Google, GitHub, and Apple authentication providers, along with session persistence and token-based security.
- **AI-Powered Profile Generation:** Integrated Gemini API for AI-based profile summary generation, automating resume content creation for users and enhancing the resume-building process through intelligent suggestions.
- **Optimized Database & Query Handling:** Leveraged PostgreSQL for efficient data retrieval and handling of complex data models, with optimized queries for managing multiple user profiles, resume states, and revisions.
- **Security & Performance:** Secured the platform with CSRF tokens, PBKDF2 hashing for password storage, and session management, while enabling horizontal scalability through a microservice architecture using React, Django, and REST APIs.

Netflix
Git | **Live**

OTT Streaming Platform — *Django, Sqlite*

- **Streaming Service:** Developed a scalable streaming platform using Python, Django, and Sqlite, deployed on Render for reliable hosting and seamless content delivery.
- **Database & ORM:** Utilized Sqlite for database management, with Django ORM for handling complex data relationships, optimizing queries for content delivery and user interactions.
- **User Authentication:** Integrated 'allauth' and 'allauth.socialaccount' modules for secure account creation, login/logout, and social authentication, backed by session-based authentication to manage active user sessions.
- **Profile & Session Management:** Implemented a multi-profile system, allowing users to manage personalized profiles, with session-based persistence for active users, ensuring seamless transitions between devices.
- **Media Handling & Performance:** Optimized media storage and delivery using Cloudinary for handling static and dynamic media, and implemented Redis caching to improve load times for frequently accessed content and queries.

Amazon
Git | Live

E-commerce Application *React, Node.js, MongoDB*

- **Platform Architecture:** Developed a scalable e-commerce platform using React for the frontend, Node.js for backend services, and MongoDB for complex data management, including user accounts and product catalogs.
- **Robust User Authentication:** Integrated Firebase Authentication for secure logins and password recovery, utilizing JWT for stateless session management to enhance security.
- **Payment Gateway Integration:** Implemented PayPal API for secure transactions, ensuring encrypted communication and compliance with PCI-DSS standards, with real-time transaction updates via webhooks.
- **Comprehensive Admin and Order Management:** Developed a React admin dashboard with role-based access (RBAC) for managing products and orders, using Redux for global state and real-time updates.
- **Performance Optimization & Security Measures:** Optimized media delivery with Cloudinary, fast static access via CloudFront, and enhanced security with PBKDF2 hashing, encryption, and load balancing for scalability.

Mini Projects

Netflix
Git | Live

OTT Streaming Platform *React*

- **Dynamic API Integration:** Utilized the TMDB API for real-time data on newly released movies, implementing asynchronous data fetching with Axios for efficient API call management and responses.
- **Optimized Component Architecture:** Integrated the YouTube API for HD trailer playback using embedded players, while implementing a component-based architecture in React to boost performance through memoization and lazy loading techniques.

OLX
Git | Live

Virtual Marketplace *React, Firebase*

- **Firebase Integration:** Implemented Firebase Authentication for secure user management and Firestore as a NoSQL database for product listings, utilizing Cloud Functions for automated notifications.
- **Dynamic UI:** Built a dynamic UI with React Hooks, using useEffect for data fetching and useContext for global state management, enhancing performance for real-time product browsing.

Shopping Cart
Git | Live

E-commerce Application *Node.js, MongoDB*

- **Authentication & Access Control:** Implemented session-based authentication with Express.js and express-session, and developed an admin panel using Mongoose for CRUD operations with middleware for admin permission validation.
- **Real-Time Functionality:** Utilized MongoDB for data storage, implementing asynchronous server-side logic in Express.js to facilitate real-time updates and enhance user interactions.

Technical Skills

Languages: Python, JavaScript, TypeScript, SQL, HTML/CSS

Frontend Development: React, Redux, Bootstrap, Handlebars (hbs), Django Templates

Backend Development: Django, Django REST Framework, Node.js, Express, Mongoose, MVC/MVT Architecture

Database and Storage: PostgreSQL, MongoDB, SQLite

Cloud & Storage: AWS S3, Cloudinary, Firebase

API Integrations: Google API, PayPal, Razorpay, Twilio, TMDB, JWT

DevOps & Deployment: CI/CD, NGINX, AWS EC2, Docker, Gunicorn, PM2, Render, Heroku, Vercel

Version Control & Tools :Git, GitHub, GitLab, Postman, Figma, Canva, pip, npm

Education

Brototype **2023 – 2024**

Web development

Mahatma Gandhi University **2020 – 2023**

Bachelor of Arts in Economics

Institute of Chartered Accountants of India **2019 – 2020**

CA Foundation

Self Declaration

I hereby declare that the above information is true and correct to the best of my knowledge.

– Alan Chris Antony