BHARATH SHANMUGAM

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OBJECTIVE

Detail-oriented Software Engineer with hands-on experience in backend development and a strong foundation in Python, SQLModel, SQLAlchemy, FastAPI, PostgreSQL, Docker, and API integrations. Proficient in leveraging AWS Cloud services to optimize system performance and using Git and GitHub for effective version control. Seeking to apply my skills in designing scalable systems, optimizing databases, and enhancing application functionalities in a challenging role at a forward-thinking organization. Committed to continuous learning, innovative problem-solving, and contributing to the success of dynamic development teams.

EDUCATION

Bachelor of Technology ,
Electronics and Communication Engineering
Siddhartha Institute of Science and Technology, JNTU Anantapur CGPA: 7.02/10, June 2024

Intermediate, Sri Chaitanya Junior College, Board of Intermediate Education, Tirupati, 2018

SSC, Little Flower English Medium High School, Secondary School Certificate, Tirupati, 2016

TECHNICAL SKILLS

Programming languages	Python, C
API Frameworks	FastAPI, GraphQL
Web technology	HTML, CSS, JavaScript
Database	MySQL, SQL, PostgreSQL
Cloud	Amazon Web Services (VPC, EC2, S3, RDS, LAMBDA, SNS)
Operating system	Windows and Linux
Computer tools	MS Word, MS Excel, MS PowerPoint
Tools	Git, GitHub, VSCode,Excel, Word, PowerPoint

WORK EXPERIENCE

Backend Engineer   April 2024 - Present
TEK STRUCTERS

- **Architected:** Designed and implemented scalable backend solutions using Python, significantly boosting the CRM system's performance and reliability.

- **Collaborated:** Worked closely with Frontend Engineers on system architecture and design, actively engaging in daily standups and status meetings to ensure cohesive development and project alignment.

- **Mastered:** Gained expertise in FastAPI, SQLModel, SQLAlchemy, and Object-Relational Mapping (ORM) techniques to optimize database interactions and enhance application performance.

- **Enabled:** Facilitated GraphQL implementation for advanced querying, improving data retrieval efficiency by replacing traditional HTTP APIs.

- **Optimized:** Leveraged AWS Cloud services to improve backend performance and support various operational tasks.

- **Deployed:** Operated in a Linux environment for development and deployment, ensuring a stable and consistent platform.

- **Managed:** Oversaw version control using Git and GitHub, ensuring high code quality and efficient team collaboration, occasionally deploying Docker containers to manage and isolate development environments.

Key Achievements:

- **Architected and Implemented:** Engineered the CRM backend using FastAPI, ensuring efficient data handling and seamless frontend integration.
- **Optimized:** Utilized SQLModel and SQLAlchemy to design robust database models, optimizing PostgreSQL for high performance.
- **Containerized:** Deployed applications using Docker, enabling consistent environments and facilitating easy scalability.
- **Enhanced:** Integrated WhatsApp APIs to provide real-time messaging capabilities, significantly improving customer interaction and engagement.
- **Maintained:** Managed project source code with Git and GitHub, ensuring efficient version control and collaboration.

PROJECTS

1 SMART PARKING SYSTEM

- Crafted a user registration website for Smart Parking System.
- Enabled online reservation of parking spaces through a web application.
- Executed a confirmation alert upon user registration.
- Integrated a map icon for easy navigation using Google Maps.
- Utilized LED indicators to display parking space numbers.
- Recorded entry and exit times, generating bills upon departure.

2 All View Blogs

- Created and hosted a website on Amazon Linux using Elastic Compute Cloud.
- Implemented a load balancer to manage incoming website traffic.
- Utilized an auto-scaling group to optimize website traffic.
- Maintained production code backups in a GitHub repository.
- Monitored server performance using CloudWatch.

SOFT SKILLS

- Effectively articulate ideas through exceptional verbal and written communication skills
- Collaborate seamlessly with team members, fostering an environment of effective teamwork
- Rapidly acquire new knowledge and skills, showcasing a proactive approach to continuous learning
- Exhibit versatility and thrive in varied and dynamic environments
- Showcase a demonstrated ability to deliver high-quality results within established timelines
- Proactively engage with developers to collaboratively tackle daily challenges.

DECLARATION

I hereby affirm that the information provided is accurate to the best of my knowledge.

(BHARATH SHANMUGAM)