ANAND SIVAKUMAR

SENIOR APPLICATION SOFTWARE ENGINEER | COIMBATORE, INDIA | 8667735882

DETAILS

Coimbatore
India
8667735882
anand040593@gmail.com

SKILLS

- Agile Methodologies
- Python
- AI Development
- Flask
- Api Development
- Database management
- MySQL
- GitHub
- AWS
- Docker
- OpenCV
- Java
- SQL

PROFILE

Dynamic Senior Application Software Engineer with extensive expertise in Python, Java, and AI, renowned for creating user-centric applications like DigiForm which revolutionized form-filling efficiency and accessibility. Proven capability in AI Development, API Development, and AWS, dedicated to driving forward software innovation and achieving measurable outcomes in technological advancements.

EMPLOYMENT HISTORY

senior application software engineer at applied automation system pvt lts, Coimbatore
Feb 2016 — November 2024

- Developed ProPreparatoryLNX, a robust Spinning Online Production Management System, showcasing innovative solutions and software development skills.
- Contributed to PROLNX AIO200 by developing server-side functionality and testing utilities, emphasizing problem solving and performance improvement.
- Worked on various Android projects for IoT and home automation, demonstrating out of the-box thinking and design solutions.
- Participated in the development of PSA MOP IIOT for monitoring oxygen production across India, highlighting requirements evaluation and team collaboration.
- Developed Essence AI to streamline codebase understanding and exploration, contributing to project success.
- Created PrepyAI for enhancing exam preparation through high-quality practice questions, focusing on deadline delivery.
- Designed DigiForm, an AI assistant for simplifying form-lling processes, reacting innovative solutions.
- Contributed to 2ndCareers, connecting experienced professionals with job opportunities, showcasing team collaboration and problem-solving abilities.

EDUCATION

BE, Sri Ramakrishna Engineering College, Coimbatore
June 2012 — May 2015

Graduated with a CGPA of 7.3 in Electronic and Communication Engineering

Diploma, K.S. Rangasamy Institute of Technology, Trichengode
June 2009 — May 2012

Achieved an aggregate percentage of 90.5 in Electronic and Communication Engineering

Secondary School, Yuvabharathi Matriculation Hr. Sec School, Salem
June 2008 — May 2009

Completed 10th grade with an aggregate percentage of 65

★ PROJECTS

2ndCareers, Coimbatore

Backend Lead

Technology used: Python,

Flask, Aws, GitHub,

MeiliSearch.

2ndCareers connects professionals over 50 with organizations seeking part-time leaders and contributors in fields like Sales, Technology, HR, Finance, and Marketing. The platform offers project-based work, temporary roles, and revenue generation opportunities, promoting modern work models beyond traditional employment. Additionally, it fosters a community for individuals over 50, providing a marketplace for learning and career advancement, supported by partners offering coaching and training services. My contribution as follows

- Designed and implemented the MySQL database architecture for optimal performance and scalability.
- Led the API development, designed the flow, and coordinated work distribution among a team of five engineers.
- Utilized GPT-4 for extracting and processing resume details, enhancing data accuracy and relevance.
- Integrated professional profiles and job details into MeiliSearch for effective recommendation systems.
- Collaborated with front-end team for seamless integration and user experience.
- Deployed the project on AWS ECS by running CI/CD pipelines in GitHub, ensuring smooth and efficient deployment.
- Ensured project milestones were met on time, maintaining high quality and reliability standards.

DigiForm, Coimbatore

Technology used: Python,

Flask, Aws, vocode, OpenAI.

DigiForm is an AI assistant designed to simplify the form-filling process for accessing financial services, applying for admissions, and availing healthcare. Recognizing the barriers posed by complex forms, especially in regions with limited literacy, DigiForm aims to enhance efficiency and exclusivity. By leveraging AI technology, DigiForm streamlines the task of completing forms, making it faster, less tedious, and less error-prone. This tool addresses the common challenges of form filling, ultimately improving user experience and accessibility.

- Supported API development to enhance overall system functionality and performance.
- Extracted data from Aadhaar and PAN using Tesseract and OpenCV, ensuring accuracy and efficiency in data retrieval.
- Converted extracted data from Tesseract to JSON format using OpenAI, facilitating seamless integration and data processing.
- Integrated Vocode to generate calls for obtaining details from customers, improving the user experience and streamlining data collection.

ESSENCE AI, Coimbatore

Technology used: Python,

Flask, Aws, OpenAI.

Essence AI streamlines code base exploration with a natural language chat feature, helping developers quickly understand repository structure. Key features include easy onboarding, informed repository exploration, and powerful semantic search for quickly finding code snippets, boosting productivity.

- Supported API development to enhance system functionality and enable seamless interactions with the natural language chat feature.
- Embedded GitHub into the Quadrant platform, improving repository exploration and developer productivity.
- Contributed to streamlining the code base exploration process, facilitating quick understanding of repository structure.

PrepyAI, Coimbatore

Technology used: Python,

Flask, OpenAI, Docker

PrepyAI enhances exam prep by generating high-quality practice questions from your textbook. It boosts retention by up to 50% through self-testing. Key features include seamless textbook integration, customizable question options, diverse multiple-choice questions, and instant feedback to track progress and identify improvement areas.

- Developed APIs to enhance system functionality and ensure seamless integration with various components.
- Extracted index data from textbooks using PyPDF2, enabling the generation of high-quality practice questions.
- Used OpenAI GPT-4o Mini to generate 20 random questions from selected chapters, boosting retention and enhancing exam preparation.
- Built and containerized the application using Docker, ensuring consistent deployment and scalability.
- Deployed the solution on DigitalOcean, optimizing performance and availability for users.

PSA MOP IIOT, Coimbatore

Technology used: Python

The Pressure Swing Adsorption (PSA) Medical Oxygen Plant is a government initiative to monitor oxygen production in India. At each site, a PLC collects data on oxygen pressure, purity, and flow every five minutes, which is sent to an IIoT controller and then to a cloud server via MQTT. This data is stored in a database and displayed on a web application for easy monitoring and access.

- Developed a Python program for the IIoT controller to collect data from PLCs every five minutes and send it to the cloud using MQTT, ensuring accurate and timely monitoring of oxygen production.
- Assisted in the installation of the controller program for over 1000 controllers across India, providing extensive software support to ensure smooth operation and data collection.

ANDROID PROJECTS, Coimbatore

Technology used: Java,

Android studio

PROLNX AIO200, Coimbatore

The PROLNX AIO200 utilized data from the AIO200 embedded board, catering to smaller mills that may not afford traditional PLCs. Developed by our R&D team, this board acted similarly to a PLC. I contributed by developing the server-side functionality using Java and creating a utility in Java Swing for testing purposes.

ProPreparatoryLNX, Coimbatore

The ProPreparatoryLNX is a robust Spinning Online Production Management System designed for departments ranging from Blow-Room to Ring Spinning and Auto Cone Winding. I developed a dynamic monitoring screen using data from a PostgreSQL database, employing both Java and JavaScript for implementation.