Prakash Agarwal

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Education

Indian Institute of Information Technology Dharwad (IIIT Dwd)

B.Tech. in Computer Science and Engineering

Jul'24

Professional Experience

Backend Python Developer - Intern, Doxper

Feb'24 - Jul'24

- Converted manually maintained JSON to an optimized mysql database schema, managed by Django ORM, boosting operational efficiency by 50%
- Integrated an organization-provided API to sync camp details and assign up to 100 prescription sets to camps, enabling first-time tracking of prescription usage in hospital's camps
- Automated MIS master report creation by fetching sub-organization reports from AWS S3, reducing manual effort using **Openpyxl and Pandas**
- Migrated prescription creation feature from TaskCutter microservice application to main application
- · Revamped the process of creation of pharmacy transcription reports as per new report formats

Software Developer Intern, Jabroyd

Jun'22 - Jul'22

- · Learned Django framework and trained ML models within two weeks to meet organizational requirements. Delivered a interactive CRM API for managers & store/warehouse employees, imporving operational efficiency
- Trained ML models like XGBoost for predicting fuel usage in distinct phases of flight, having 79% accuracy

Projects

GlobalLearn, Next Gen Al Powered Learning Platform

Dec'23 - Apr'24

Gained 7 star on repository from developers all around world.

- Led a team of 4 to develop an Al-powered platform that dubs educational content into other languages, increasing accessibility
- Created AI and backend servers for real-time dubbing and auto note generation, reducing educator workload
- · Designed a scalable SaaS solution using Python, TypeScript, Express.js, AWS, and Django-DRF, etc supporting over 10,000 users

Digital Twin of Water Supply Management of Institute, Digital Twin Over Blockchain

- Led a team of 4 to build a digital twin for water supply management, reducing water wastage by 15% through predictive analytics
- Implemented a predictive model via XGBoost to optimize water allocation by 20%, improving resource management
- Integrated blockchain technology to enhance governance and enable real-time monitoring of water consumption

FingerPrint-Sequencing, Multi-Fingerprints Biometric Authentication System

Jan'23 - Jun'23

- Proposed and engineered, with team of 4, a multi-fingerprint authentication system to enhance biometric security, reducing unauthorized access risk
- · Processed data of 600 individuals to create a reliable authentication mechanism based on sequential fingerprint input
- Designed and implemented the algorithm using Python and OpenCV, gaining expertise in biometric security and system integration

Skills

Languages: C++, Python, HTML, JavaScript

Technologies & Tools: Django, Django-DRF, Git, Docker

Cloud & Databases: AWS, MongoDB, MySQL

Knowledgeable in: Java, PostgresSQL, Redis, Google Cloud, NodeJs, Express.js

Achievements

- Leetcode [Knight]: Max-Rating 1937, Among Top 5% leetcoder & Codechef [3 star]: Max-Rating 1717
- Publication: Agarwal, Prakash et al. "Digital Innovation in Water Governance: Exploring the Synergy of Digital Twins and Blockchain". (In SmartNets 2024 - SCitiesIoE)[May'24]
- Received Certificate of Appreciation for exemplary performance, analytical ability and on-time delivery from Doxper

CPI: 7.98