Overview

Software Developer with experience in backend and Frontend development, seeking a challenging role in a reputable organization to leverage expertise in Python technology and contribute to the company's success. Open to opportunities in Pan India targeting functional areas such as software development, data management, Machine Learning, and cloud services across various industries

Rahul Kumar

Software Developer



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Full Stack Developer and Python Developer with hands-on experience in backend and

Proficient in writing production-level code for both backend and frontend applications,

Comprehensive understanding of the complete Software Development Lifecycle (SDLC) right from requirement analysis, documentation (technical & functional specifications and

Proficiency in Python, Flask, Pandas, and AWS, while adeptly handling data for projects. Successfully implemented AWS services, including EC2, S3 and RDS, to optimize business

Exhibiting strong leadership skills and the ability to work effectively in a team environment, coupled with a proven track record of improving system performance

profile



Core Competencies

Python Development

Software Development Lifecycle

Requirement Gathering/Solution Development

Machine Learning

System Performance Optimization

Data Management Strategies

Soft Skills



Internships

Profile Summary

frontend development.

May-June 2023

Full Stack Web Developer

GUVNL, Gandhinagar

with in-depth knowledge of Python React.js and Node.js.

design), and coding to maintenance of proposed applications.

logic and guarantee high data consistency and availability.

through innovative ideas and suggestions.

Key Result Areas:

- Write production-level code for both backend and frontend of the GeoUrja web service.
- Integrated frontend and backend for essential network models, including transformers, HT & LT poles, etc., allowing dynamic updates to create users' profile pages.
- Acquired in-depth knowledge of React.js, Node.js, and Sequilize for real-life applications.
- Creating APIs to handle daily requests and guarantee high data consistency and availability, catering to customer needs.
- Gathering data from large databases and providing quick data solutions to customers, ensuring timely and accurate information delivery
- Writing efficient PSQL queries and managing the database effectively, optimizing data retrieval and storage processes.
- Contributing innovative ideas to improve system performance, driving continuous improvement and operational excellence.

Aug 2023-Jan 2024

Software Engineer

Foxes.ai, US

Communicator Innovator Planner Thinker

Analytical

Collaborator

IT Skills

Primary Skills

- Python
- C++
- Flask **Pandas**
- **JavaScript**
- Node.js
- React.js
- MySQL/PSQL
- **AWS**
- HTML5
- CSS3

Key Result Areas:

- Contributing to Foxes.ai, a dynamic service provider specializing in customer services.
- Fetching data from Apollo and website links and setting up the database using an AWS online server.
- Data cleaning and merging using Python to ensure data accuracy and integrity.
- Utilized AWS services such as CloudWatch, EC2, and S3, RDS, SNS, optimizing cloudbased infrastructure and services.
- Built Python utilities to transform data into required formats and create desired files for processing, optimizing data management processes.

Secondary Skills (Tools)

Postman, Git, GitHub, Power BI



- 2024: B.Tech in Engineering, IIT Gandhinagar
- **2024:** B.Tech (Minor) in Computer Science Engineering, & IIT Gandhinagar

Personal Details

Date of Birth: 04/01/2004

Address: 304, Hayath Homes, BTML First

Stage, Bangalore, 560066

Languages Known: English and Hindi



- Won in the HackRush competition.
- Represented IIT Gandhinagar in the 55th inter IIT Sports Meet in Cricket.
- The 5km marathon "Beat the Barden Challenge" was completed in 20.8 minutes.

Chemical PORs

Organizer of Nyasa Club IITGN [Oct 2022 – Dec 2023]

- Led the planning and execution of a successful sports event for children from nearby villages.
- o Efficiently organized a Sanjeevani medical camp, delivering valuable services to 600+ participants.
- Math Tutor at Basan Village Middle School provides weekly assistance to students.

Coordinator of IITGN-Cricket League (ICL) [Oct – Nov 2022]

- Organized and oversaw a month-long cricket league comprising eight teams from various colleges.
- Organized over 15 T20 matches with a team of 4 Core Members and 10 General members.



Projects Undertaken

Open Politica

Key Responsibilities:

- Build the microservices which handles the part of data and break into the smaller part and store into db.
- Passes the data info using AWS sgs services and handles the business logic over Lambda.
- Build a tool which handles daily requests and store continuously into db and s3 bucket so the consistency and availability of data will be high.
- Written scripts which gather the data from a large database and provide it to the customer in no time.
- Written SQL to get a data and DML DDL to handle the DB efficiently.
- Given ideas to the team to improve the performance of existing systems.

AI-Generated Text Detector

Key Responsibilities:

- Led a team of three to develop an AI-generated text Detector enhancing text classification accuracy.
- Expanded the Human Comparison Corpus (HC3) by incorporating questions, human-written answers, and responses generated by llama2, mistral, phi2, and ChatGPT-4 using vLLM for fast inference.
- Trained a Longformer model on the dataset to classify text with confidence scores, achieving training accuracy of 78%. Also, implemented frontend interface allowing users to input PDF or zip files.
- Integrate the backend system to extract text from PDF files and process it through the Longformer model, displaying results on the frontend interface.

Food Delivery System

Key Responsibilities:

- Designed and developed a food delivery system web application using Flask, SQL, HTML, and Bootstrap, having features of different views and authentication, as a group of 10 members.
- Optimized database schema and ER Diagram to boost backend query performance.
- Utilized SQL queries to manage and display customer orders, delivery status, and restaurant.

Language Model Pretraining and Fine Tunning Kev Responsibilities:

- Pretrained a BERT-Base-Uncased language model on the 'wikitext-2-raw-v1' dataset.
- Fine-tuned pre-trained model on SST-2 dataset for sentiment analysis, achieving an Accuracy of 60%.
- Fine-tuned pre-trained model on SQuAD dataset for question-answering, getting an accuracy of 70%.
- Shared models (pre-trained and fine-tuned) on the Hugging Face model hub for community use.
- Implemented a user-friendly UI using Flask to facilitate easy usage of the models.