Rohit Kadappa Gundakalli

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Education

University of Massachusetts Amherst

Feb 2023 - Dec 2024

M.S., in Computer Science

Amherst, USA

Coursework: Advanced Algorithms, NLP, RL, ML, Distributed & Operating Systems, Software Engineering, Statistics

Banglore Institute of Technology

Aug 2016 - Aug 2020

B.E., in Computer Science

Bengaluru, India

Coursework: Data Structures & Algorithms, Databases, Machine Learning, Python Programming

Experience

Wow Labz Pvt. Ltd.

Aug 2021 - Dec 2022

Software Developer

Bengaluru, India

- Designed and implemented game registration, event management, and wallet management modules for a crypto-enabled game platform with 1M+ users, using Python FASTApi and Kafka within a 3-month timeframe.
- Built an event-capturing pipeline using web sockets and a producer-consumer mechanism, enabling the persistence of real-time events in Redis with a response time of a few hundred milliseconds.
- Developed an advanced event processing algorithm, efficiently disbursing rewards for thousands of events per second and automating report generation with configurable parameters.
- Spearheaded development of core modules, including user and wallet management, for a crypto trading app with 100K+ users, making it one of the first applications in India to support INR trading.
- Prototyped an efficient KYC (Know Your Customer) pipeline, leveraging Redis, Python FASTApi scheduler, and AWS services, reducing onboarding time by 20% while ensuring user privacy.
- Engineered the backend system for the admin app of a workspace management platform for 200+ tech companies in Bengaluru, improving member onboarding and administrative processes by 15%.
- Programmed an automated invoice generation module, reducing 20 hours of manual effort and expediting revenue tracking for precise projections.

Ellucian Higher Education Systems

July 2020 - Aug 2021

Software Developer

Bengaluru, India

- Engineered an advanced data extraction system using Python to retrieve specific remote datasets as per user specifications; delivered critical XML outputs which optimized HR workflows and reclaimed 5 hours per week.
- Revamped the HR processes of the Banner HR ERP from legacy Pro C to Groovy.
- Programmed automated functional batch test suite to ensure the new processes worked efficiently with other modules.

Projects

University Buy Sell Application | Python, MongoDB, HTML, JavaScript, CSS, AWS, SendGrid

Nov 2024

- Developed the student login and registration module with two-factor authentication, utilizing Python FASTApi, MongoDB, and SendGrid to send OTPs to registered emails.
- Built the listing management module with image upload functionality stored in AWS S3 and implemented admin analytics to track popular listings, inquiries, and revenue turnover from sold transactions.

Quote Classification and Interpretation | Python, Hugging Face, PyTorch, Colab

May 2024

- Prepared a multi-label quotes dataset and fine-tuned state-of-the-art Transformer models (BERT, GPT-2, and T5) to perform multi-label classification of quotes, achieving an accuracy of 63%.
- Explored zero-shot, one-shot, and few-shot prompting techniques on T5 and Gemma models to enhance the quote interpretation task. Conducted extensive analysis of the results and improved the prompts, resulting in 85% accuracy.

Stock Trader Server | Python, Docker, Amazon AWS

- Designed a multithreaded stock trader server with a thread pool model for concurrent request handling.
- Implemented a fault-tolerant system by replicating the database three times. Integrated caching to boost API request throughput while ensuring strict consistency across all replicas for a resilient and high-performance trading platform.

Technical Skills

Languages: Python, Java, C, PySpark, R, Groovy, C++, React, JavaScript, GO, SQL Tools: Git, AWS, Docker, CI/CD Pipeline, TensorFlow, Postman, Jira, Pandas, NumPy

Technologies: MongoDB, Kafka, Nuclio, Redis, OpenCV