Suchit Gupta

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EDUCATION

State University of New York, Buffalo, USA

Aug 2023 - Dec 2024

Masters of Science in Computer and Information Science

Coursework: Analysis of Algorithms, Machine Learning, Computer Security, Data Intensive Computing

Mumbai University, Mumbai, India

Aug 2016 - May 2020

Bachelor of Engineering in Computer Engineering

Coursework: Data Structures and Algorithms, Compiler Construction, Operating Systems, Computer Networks, DBMS, Software Engineering, Artificial Intelligence, Finance Management, Advanced Database Systems, Natural Language Processing

PROFESSIONAL EXPERIENCE

Wellness Forever Medicare Limited, Mumbai, India

Senior Software Engineer

Feb 2023 - Aug 2023

- Migrated monolithic order processing pipeline to AWS serverless stack by utilising Step Functions, SQS, EventBridge, and Lambdas, which enhanced the order processing unit's throughput by 80% along with its concurrency, and traceability.
- Implemented intelligent replication of consumer order data into MemoryDB and ElasticDB, dividing hot, warm, and cold orders, reducing queries into RDS and resulting in cost savings of 40% and query time savings of more than 95%.
- Conceptualised and executed an orchestrator middleware system to decouple a system responsible for processing and transmitting data among diverse services resulting in a 2.5x increase in streamlined broadcasting and enhanced communication.
- Constructed a sophisticated fanout architecture, leveraging the capabilities of SNS, SQS, and Lambda facilitated efficient inter-service communication enhancing event distribution, performance and throughput by 8 times.

Blackcurrant Labs, Mumbai, India

Software Engineer

Dec 2020 - Feb 2023

- Responsible for leading a team of 4-5 peers for end-to-end software development from requirement gathering to delivery.
- Leading initiatives for conceptualising architecture, writing user stories, development and optimization as well as providing version upgrades and worked on over 8 projects over the tenure of 2 years.
- Leveraged advanced proficiency in technical analysis of financial instruments to devise front-testing and backtesting solutions, facilitating the seamless implementation of multiple concurrent trading strategies within the derivatives market.
- Actively involved in development operations such as setting up CloudFormation, CI/CD pipelines, Docker Compose and performing POCs to integrate ideal third party services.

SKILLS

- Technical Languages: Typescript, Javascript, Python, C/C++, SQL, Swagger, Java
- AWS: Step Functions, Lambda, Event Bridge, SQS, SNS, CloudFront, Cloudformation, API Gateway, VPC, EC2, ELB
- Frameworks & Libraries: Angular, NodeJS, ExpressJS, React, RabbitMQ, Socket.io, Ionic, FastAPI, TALib, Streamlit, Django, Flask
- Databases: MongoDB, MySQL, DynamoDB, PostgreSQL, Redis: Elasticache and MemoryDB
- Platforms, Services: Git, Elasticsearch, Twilio, Agora, KiteAPI, Strapi

PROJECTS

Hoopr: Music licensing marketplace (hoopr.ai)

- Conceptualised and developed audio transcoding and processing pipeline deployed on separate auto scaled EC2 instance working on a job based message queuing service.
- Incorporated Cloudfront, Elasticsearch, Redis, and Imagekit to enhance the user experience, ensuring a seamless and optimised performance by 60% for a digital asset rich layout.
- Built a flexible frontend structure by harnessing the grid layout and Angular component architecture which empowered administrators to effortlessly modify the layout of key landing pages without incurring any deployment complexities.

Botlab: Algorithmic Trading bot

- Developed automated trading bot using KiteAPI for market data, RabbitMQ for streamlining order placement and updates, Redis PubSub for streaming LTPs and Python for implementation of algorithms capable of placing 50 trades per second.
- Utilised Docker Compose to effectively manage resource allocation for concurrent execution of 8 algorithms, while employing MongoDB to archive trade and LTP history and Streamlit for generating comprehensive backtesting reports.

HONOURS AND ACHIEVEMENTS

- Winner of National Level Smart India Hackathon 2019 edition.
- Scored 170/170 in Quantitative Analysis in Graduate Record Examination (top 4%ile globally)
- Published a paper on Ternary Computers in university journal in 2017

EXTRA-CURRICULAR ACTIVITIES

- Core-Committee Head, Free Open Source Software(FOSS) committee, for the year 2018-2019.
- Head of Technical Team for the technical festival 'Zephyr' of the year 2018.