ANANNYA PATRA

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EDUCATION

University of Southern California, Los Angeles

Expected: May 2025 Masters of Science in Computer Science GPA- 3.83

Relevant Coursework: Analysis of Algorithms, Database Systems, Web Technologies, Natural Language Processing

BMS College of Engineering, Bangalore

August 2017- June 2021

GPA-3.87

Bachelor of Engineering in Information Science

TECHNICAL SKILLS

Programming languages: Java, Python, GoLang, Javascript

Backend/Cloud technologies: SpringBoot, Flask, REST APIs, Hibernate JPA, JMeter, ActiveMQ, Object Oriented Design, Google Cloud Platform, Amazon Web Services(AWS), Git, Android Application Development, CI/CD, Elastic Search, Kafka(In Progress)

Database: MySQL, Oracle DB, PostgreSQL, MongoDB

Web technologies: Angular, React, HTML, CSS, Bootstrap, ¡Query, Node, HTTP

PROFESSIONAL EXPERIENCE

Bangalore, India

Athenahealth- Software Development Engineer

August 2021-July 2023

- Designed concurrent, scalable features and 30+ REST APIs(CRUD operations) for the Ambulatory Care Management System module, contributing to improved patient care, pharmacy and provider communication by 20%
- Formulated REST APIs with response time of ~85ms to send prescriptions to pharmacies, display prescription statuses, and monitor pharmacy responses, improving medication tracking by physicians by 90%
- Implemented Azure telemetry logging for 3 services and crafted Stored Procedures to implement data purging mechanisms. resulting in optimized database storage by 6% and revamped system maintenance by 10%
- Created and optimized database schemas, enhancing data retrieval performance with the addition of indexes, resulting in query execution times for CRUD operations as 5 ms for ~600,000 records
- Played a pivotal role in fixing transactional annotation in 16 services, enabling proper database entry and error logging in the event of errors and negative scenarios, fixing rollback errors and ensuring 100% ACID property maintenance

Athenahealth-Software Intern

January 2021-July 2021

- Led implementation of revamping hashing logic for mapping prescriptions and medications correctly, boosting medication accuracy and patient safety for 100% of customers
- Upgraded front-end Angular components of Northstar project from V7 to V10, decreasing security vulnerability by 25%

Bounce Scooter Share- Backend Intern

August 2020–October 2020

- Formulated Rest APIs implementing Geolocation API and Breadth First Search algorithm for real-time scooter location tracking to retrieve the location of the nearest available scooter, boosting user convenience by 78%
- Developed and launched an inventory management feature, tracking repair agents and monthly payments, ensuring flawless upkeep of scooters and achieving a 100% maintenance rate
- Acquired average hit rate for Dock-less Scooter model at 10,000 hits/s and scaled system to handle 300,000 users/day

PROJECTS

Ideate

June 2024

Spearheaded a **Django** application hosted via **AWS**, providing a web platform for users to explore and share inspirational ideas across 10+ categories, resulting in a 25% growth in unique content submissions

StockStream

Created a MEAN stack web application, hosted via GCP, devised for stock trading and portfolio management, featuring real time updates on stock prices and company's financial data with **Highcharts** graph, and current news, enhancing 60% user experience

November 2020 **HealthGenix**

Designed an Android application with SOLite DB that provides an online platform for users to buy memberships in desired partner gyms, book group classes based on availability, follow fitness routine, track nutrition intake and generate activity report

ACHIEVEMENTS/LEADERSHIP

- Published three research <u>publications</u> at IEEE conferences under division of Machine Learning, IOT and Green Computing
- Secured 70th rank in IEEE XTREME (24 hour hackathon) out of 6000 participating teams worldwide
- Received Best Project With Intent award for undergraduate project Indoor Air Quality project in 2021
- Orchestrated innovative programs and events as Executive Board Member of USC ACM since January 2024, driving 30% growth in active participation and enabling collaborative learning experiences for 200+ students
- Attended 20+ events as a member of Society of Women Engineers and organized 5 events for USC SWE association