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Professional experience

Amazon.com, Inc Software Development Engineer

August 2021 - Present

- Successfully developed and integrated services with third-party sellers, making financial offers eligible for third-party products and leading to a remarkable 30% increase in business Gross Merchandise Sales (GMS).
- Led a successful migration of the Service Provider Interface (SPI) to ensure consistent data sharing across services, resulting in a remarkable improvement of overall system cohesion by 50%.
- Enhanced integrations with other services by evaluating and collaboratively addressing each edge case with upstream clients, ensuring the provision of accurate financial offers to customers during single-page checkout. This initiative resulted in a substantial 25% reduction in the manual reconciliation process.
- Collaborated on the resolution of failing integration tests and contributed to the optimization of the CICD pipeline
 for seamless automatic code deployment, resulting in a significant 25% reduction in manual deployment time,
 equivalent to saving 8 SDE hours weekly.
- Built and fixed the data pipeline in close collaboration with data engineers to generate financial offer usage reporting, resulting in a substantial 15% increase in the business's ability to identify customer trends for different products.
- Enhanced internal search integration, achieving a 20% improvement in performance of widgets (amazon.com/pcb).
- Led initiatives to enhance Tier-1 development environment availability, resulting in an impressive 80% increase in uptime and accessibility by identifying and resolving 'maxConnectionPerHost' issues.
- Developed and enhanced the reliability of internal dashboards by systematically addressing front-end issues related to forms, implementing robust API exception handling, and mitigating race conditions to ensure seamless performance.
- Implemented scripts for data backfilling and addressing ad-hoc data requests, resulting in streamlined operations
 and a significant reduction in the number of services required, achieving an efficiency improvement of
 approximately 20%.
- Implemented and integrated shadow mode testing to mitigate the risk of customer-impacting issues, ensuring a smoother and more reliable user experience.
- Offered mentorship and guidance to one intern and a junior engineer, actively contributing to their professional development while positively impacting the team's growth.
- Successfully executed migration projects and reduced technical debt by leveraging various AWS services, resulting in the removal of unused code and an impressive average 20% increase in test coverage across systems.

CollabCafe, Inc. February 2021 - May 2021

Full-stack Development Intern

- Worked on to write 35 reusable components using Next.js, Typescript, and SASS
- Built a video chat application using Kubernetes and open source WebRTC Jits framework to serve 1000 users
- Expedited API response times by implementing an asynchronous task queue with Celery for running background tasks, achieving a reduction in response times by an average of 10%.

Education

Master of Science, Computer Science, August 2018 - May 2021

California State University, Fullerton

Bachelor of Science, Physics and Computer Science, June 2014 - April 2017

St. Xavier's College, Ahmedabad

Technical Skills

Language: Java, Python, Typescript, Go, C++

Cloud: AWS (EC2, S3, Lambda, Kinesis, Step Functions, Cloudwatch), Firebase, Docker, Kubernetes, SNS, SQS

Databases: DynamoDB, Redis, Postgresql, MongoDB, Firebase

Web Tech: Spring, Google Guice, JUnit, Kibana React-JS, GraphQL, Express-JS, Django, Next.js, Apollo Client, Material-UI

Projects

Virtual memory manager in operating system

C++, Singleton design, OOP, Page replacement algorithm

• Developed a virtual memory management system, included support for paging, Virtual Memory and page replacement to and from the backing store by utilizing LRU and FIFO page replacement algorithm.

Blogs

- **How to Setup AWS S3 with Django REST like a Beast**, Authored an extensive tutorial blog detailing the setup of AWS S3 integration with Django REST framework, showcasing expertise in configuring S3 buckets for serving static files
- Create a Production Ready Infinite Scrolling in React-Js using Power of Debounce, Throttle, and Hooks from scratch, Authored a comprehensive tutorial blog demonstrating the creation of a production-ready infinite scrolling feature in React.js, leveraging the power of debounce, throttle, and custom Hooks to enhance user experience and performance.