ASHISH AGARWAL

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EDUCATION

M.S., Computer Science | San Jose State University | San Jose, US **Aug 2022 – May 2024**
Relevant Coursework: Algorithms, Distributed Computing, Cloud Computing, Blockchain GPA: 3.95/4.00

B.E., Computer Science & Engineering | Dayananda Sagar College of Engineering | Bangalore, IN **Aug 2014 – Jun 2018**
Relevant Coursework: Algorithms, Operating Systems, Computer Networks, Compiler Design

TECHNICAL SKILLS

Programming – Java, Javascript, Typescript, Scala, NodeJS, Python, ReactJS, HTML, CSS
Database – MySQL, DynamoDB, AWS S3, MongoDB, Oracle, BigQuery, Redis
Others – Spring Boot, Kafka, Elastic search, Spark, Distributed Computing, Web Development, Android Development, Docker, Kubernetes, REST, GraphQL, Cloud Development Kit (CDK)

RELATED EXPERIENCE

PayPal | Software Engineer 2 | San Jose, US **Jul 2024 – Present**

- Integrated on-premise applications with AWS to enable PGP-based encryption and decryption of sensitive fields and files, strengthening data security across 20+ applications.
- Provisioned Kubernetes clusters using AWS CDK with integrated access to S3 and DynamoDB, enabling scalable deployments and eliminating manual setup processes.
- Engineered a developer tool for searching Control-M jobs by parameters, cutting issue resolution time by 50% in batch-heavy projects and identifying outdated or undocumented jobs.
- Devised a solution to automate vendor transaction responses, eliminating manual reconciliation, lowering accounting workload by 40%, and increasing operational efficiency.

PayPal | Software Engineer Intern | San Jose, US **May 2023 – Aug 2023**

- Built an Apache Spark batch job on GCP DataProc cluster to pull over 25M daily screening profile data.
- Leveraged HDFS and BigQuery to extract and display insights through GCP Looker, reducing analyst effort.

Zomentum | Software Engineer | Bangalore, IN **Sep 2021 – May 2022**

- Designed and improved Web APIs with Scala on the Play framework, enabling efficient RESTful interactions.
- Delivered and owned Autotask integration features using scheduled jobs and event-driven architectural system, enabling seamless data sync for over 8000 customers.
- Automated purchase order tracking with WebSockets and AWS Kinesis, using scheduled jobs for detailed order data, cutting manual checks by 50%.
- Analyzed and resolved customer bugs, decreasing weekly issues by 70% over 4 months and boosting customer satisfaction by 25%.

JP Morgan Chase and Co. | Software Engineer | Bangalore, IN **Jul 2018 – Sep 2021**

- Developed and maintained Elasticsearch server for indexing jobs and retrieval queries. Search time dropped from 11 to 1 second.
- Created REST Web APIs with Java, Spring Boot and GraphQL, exposing banker-specific and contact information for near real-time information retrieval, decreasing data lookup time by 70%.
- Owned and delivered an end-to-end Kafka based platform, achieving near real-time employee and customer data retrieval.
- Led the migration of a react application from flux to redux, improving state management and lowering application bugs by 40%.
- Built and maintained over 4 frontend applications from scratch in ReactJS and Redux, leveraging essential tools and packages.
- Initiated architectural design recommendations, accelerating development by 30% and ensuring rapid adaptation.
- Led production releases of at least 12 applications, adhering to Agile methodology to facilitate continuous integration and delivery.

PROJECTS

WeHeal | *github.com/AshishAgarwal2101/WeHeal* **Mar 2024**

- Architected an AI-powered companion for counsellors and therapists, building an LLM agent with Langchain and vector database.
- Developed functionality to summarize patient case files, provide real-time chat recommendations to counselors, and manage context based on previous interactions.

Distributed Hash Table | *github.com/AshishAgarwal2101/distributed-hash-table* **Nov 2022**

- Engineered a distributed hash table for scalable and efficient key-value pair storage and retrieval, utilizing the Chord protocol.
- Orchestrated node coordination through Remote Procedure Calls (RPCs) by minimizing lookup for key-value retrieval and facilitating addition of new key-value pairs with minimal overhead.