ASHISH AGARWAL

Bay Area • ashish21.01agarwal@gmail.com • (669) 213-8070
linkedin.com/in/ashish-agarwal-2101 • github.com/AshishAgarwal2101 • ashishagarwal2101.github.io

EDUCATION

M.S., Computer Science | San Jose State University | San Jose, US **Aug 2022 – May 2024**
Relevant Coursework: Design and Analysis of Algorithms, Distributed Computing, Cloud Computing 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, Python, NodeJS, ReactJS, HTML, CSS
Artificial Intelligence – LLM with GPT models, Langchain, Predictive Modeling
Database – MySQL, MongoDB, Oracle, Vector databases, BigQuery, Redis
Others – Spring Boot, Kafka, Elastic search, Spark, Distributed Computing, Web Development, Android Development, Docker

RELATED EXPERIENCE

Software Engineering 2 | Paypal | San Jose, US **July 2024 – Present**
- Identified and corrected upstream-settlement schema discrepancies, reducing transaction failures and enhancing data accuracy.
- 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searching Control-M jobs by parameters, cutting issue resolution time by 50% in batch-heavy projects and identifying outdated or undocumented jobs.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, reducing accounting workload by 40%, and increasing operational efficiency.
- Addressed 6 batch job failures and bugs, and contributed to resolving a major payment settlement incident impacting 10+ merchants.

Software Engineering Intern | Paypal | San Jose, US **May 2023 – Aug 2023**
- Built a batch job with Apache Spark that ran on GCP DataProc cluster to pull profile over 25M daily screening data.
- Leveraged HDFS and BigQuery to extract and display insights using GCP Looker, which reduced the amount of analyst effort.

Software Engineer | Zomentum | Bangalore, IN **Sep 2021 – May 2022**
- Designed and improved Web APIs with Scala using 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, reducing manual checks by 50%.
- Analyzed and resolved customer bugs, reducing weekly issues by 70% over 4 months and boosting customer satisfaction by 25%.

Software Engineer | JP Morgan Chase and Co. | 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 to enable 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 reducing application bugs by 40%.
- Built and maintained over 4 frontend applications from scratch using ReactJS and Redux, leveraging essential tools and packages.
- Initiated architectural design recommendations, which accelerated development by 30% and ensured rapid adaptation with fast-paced environment.
- 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**
- An AI-powered companion for counsellors and therapists.
- Developed end-to-end LLM agent with Langchain and vector database to summarize patient's case files and provide chat recommendations to counsellors, while managing context based on past interactions.

User Productivity Plugin | *github.com/AshishAgarwal2101/user-productivity-plugin* **May 2023**
- A chrome plugin for user productivity by allowing users to set daily goals.
- Utilized Javascript and Chrome APIs to create background scripts to monitor user time spent per website, along with the total time.

Distributed Hash Table | *github.com/AshishAgarwal2101/distributed-hash-table* **Nov 2022**
- A distributed hash table for key-value pair storage and retrieval.
- 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, utilizing the Chord protocol.