

Pratik Bhagwat

pratikbhagwat.github.io — linkedin.com/in/pratikbhagwat1202 — pratikbhagwat4@gmail.com

WORK EXPERIENCE

Software Engineer – Coupang (AI and Data Platform) (Jan 2022 - Present) (Seattle, Washington)

- Designed, implemented, and launched an organization-wide analytics notebook platform for 4500+ monthly active users. Utilized the frameworks like React.js for UI and Django Admin as BFF.
- Enhanced the Apache Zeppelin open-source project with heavy query handling capacity for Presto and Livy Spark workloads. Additionally added version control features, facilitating more than 50,000 daily active jobs.
- Improved the Customer Experience Analytics platform by introducing functionalities to the Funnel, Journey, and Trend analysis sections, leveraging Scala and Spark, and catering to over 100 monthly active users.
- Engineered a top line metrics report by building data pipelines to collect usage and system metrics for BI tools like Superset, Redash, Zeppelin, and Tableau.

Software Engineering Intern – Coupang (May 2021 - Aug 2021) (Seattle, Washington)

- Designed, built, and delivered a UI application for the Funnel and Journey analysis in Customer Experience Analytics Platform. Used technologies like Vue.js, Typescript, Springboot for BFF.
- Expanded the set of APIs required by the frontend in an existing Spring Boot application.

Software Engineer – Larsen and Toubro Infotech (Feb 2018 - Jun 2019) (Mumbai, India)

- Lowered resource efforts and accelerated the employee allocation process 10x faster by designing and implementing an automation pipeline using SAP HANA, SuccessFactors, and HANA Cloud Integration.
- Developed an invoice generation application for the contracts in the organization using SAP ABAP, Adobe Lifecycle, reducing manual efforts at the end of every billing cycle.
- Enhanced the contract management system with features like contract amendments and milestone monitoring.

TECHNICAL SKILLS

- **Programming Languages:** Java, Golang, Python, Scala, JavaScript, TypeScript, C, C++, SAP ABAP, SQL
- **Cloud Stack:** AWS (EKS, EC2, S3, EFS, IAM)
- **Infra Stack:** Kubernetes, Docker, Terraform, CloudFormation, Ingress
- **Tools and Web Stack:** React.js, Vue.js, Node.js, Express.js, Spring Boot, Form Calc, HTML, CSS, Git
- **Data Engineering:** Hive, Presto, ClickHouse, Spark SQL, MongoDB, MySQL, PostgreSQL, SAP HANA, Apache Airflow, Apache Zeppelin
- **Core CS Concepts:** Algorithms, Data Structures, Computer Networking, Distributed Computing, Machine Learning, Object-Oriented Programming

PROJECTS

Product Recommendation and Ranking System

Designed an e-commerce product recommendation system using NLP and Deep Learning on a dataset of 25000+ apparel text and image features from Amazon.com.

A* Path Finder Algorithm Visualizer

Implemented an A* algorithm on a topological map with terrains such as water, road, forest, and mountains, accounting for different seasons in the algorithm. Visualized the algorithm in action.

Routing and Reliable Data Transfer over UDP

Implemented RIPv2 routing protocol and designed a Reliable Data Transfer protocol by deploying a VM network of 10 nodes on Docker.

Relational and NoSQL Database Application Comparison

Developed a thread-safe application to compare MySQL vs MongoDB performances for throughput, latency, and ACID properties. The application generated a TPC-C-like workload for e-commerce order traffic of over 1000 orders with up to 10 concurrent threads.

Parallel Matrix Multiplication

Implemented a Cannon's algorithm for matrix multiplication using Java MPI. Tested the algorithm on a multicore cluster with 65536×65536 matrices.

Web UI based Automator for Grocery Shopping - JAVA, C++, Selenium IDE, ARM-Mbed, Load cells

Designed a system to buy the groceries from a predefined URL by sensing the weights of the same. Used the selenium ide to emulate the human actions required to buy the grocery product. Developed a JAVA application to get the load cell data from the ARM-Mbed development board.

EDUCATION

Master of Science, Computer Science (Rochester Institute of Technology)

GPA: 3.79/4.00

Bachelor of Engineering, Electronics and Telecommunications (University of Mumbai)