Tarang Rastogi [(click to see portfolio)](#)

Contact
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- **LinkedIn**

Career Objective
Software Engineer with a strong foundation in building scalable architectures, optimizing asynchronous , parallel systems, and handling real-time data applications. Seeking to leverage my expertise in backend development, cloud deployment, and parallel programming in a challenging software engineering role

Skills
PRIMARY

Languages/Frameworks

Backend

Python | Golang | Java | Django | Gin | SpringBoot

Databases

GraphQL | Postgres | SQL

Tools/Technologies

Backend

RabbitMQ | Redis | MQTT | Celery | Docker | Ansible | Shell Scripting | Linux ubuntu | Signoz | Hasura | **Nvidia – Jetson**

SECONDARY

Frontend

React.js | Next.js | HTML Javascript | css | bootstrap

Profile Links
- LeetCode
- GeeksForGeeks
- ScalerAcademy
- Codeforces
- GitHub

Achievements And Certificates
- Completed Master Spring Framework Certificate course on Udemy (2022)
- Scaler Academy Fullstack Bootcamp (2022-2023)
- Backend(Java/Springboot)
- Data Structures (2022)
- Low Level Design Scaler

Software Engineer (Fullstack)   *7/2023 - Present*
StackFusion Private Limited (Pune , Gurugram)
Project: Jetson - Fastag Parking Management System (Django , Redis , PSQL , Mqtt)
- Developed and maintained an asynchronous proxy server with cache and PubSub mechanisms, integrating various hardware sensors (EMF loop, barrier, RFID readers, etc.) to manage parking sites at national/international airports, malls, and tech parks.
- Refactored synchronous code into multithreaded, asynchronous code, reducing processing time by **40%**. **Achieved 100% increase in total clients from 200 to 400**
- Modularized the system by separating concerns and adopting a **microservice like architecture** for better scalability and maintainability.
- Implemented robust health checks, error monitoring, and system resource monitoring using **Ansible, Shell Scripting , Sentry, Signoz ,and OpenTelemetry**. minimizing system downtime by > **50%**.

Project: Embedded RFID Parking System (Go , RabbitMQ, GQL , PSQL , Celery, Redis)
- Built a highly optimized tag/pass-based parking system using **Golang**, achieving **>400%** reduction in transaction time through parallel processing.
- Designed a **multilane architecture** enabling a single edge node to handle multiple parking lanes, **reducing hardware Installation / deployment costs** by > **50%**.
- Used Hasura for **real-time** pass subscription management and sensor configuration improving system configuration flexibility and **reducing downtime**
- Developed a microservice for handling and acknowledging MQTT messages across various sensors and devices at parking sites.
- Consolidated redundant MQTT handling code into a single service, improving **maintainability and reducing duplication** . **Reduced I/O time between sensors by >100 %** across all services
- Leveraged MQTT **message acknowledgment** to ensure reliable communication between input sensors and output devices across parking systems.

Project: Dynamic QR Code System (hasura , redis , GQL , PSQL , go , MQTT)
- Designed and implemented a fallback system using **dynamic QR codes to facilitate UPI transactions when Fastag transactions fail.**
- Built RESTful APIs using Gin to enable real-time data syncing from cloud databases using **Hasura GQL Subscriptions and Actionsof products**

Project: Next.js/React.js Client Dashboard (Next.js , React.js , HTML , Javascript)
- Contributed to the creation of client/operator dashboards by building forms and views to improve usability of parking management systems.
- Integrated real-time ticket data into dashboards using GraphQL and Hasura for Reporting and analytics.
- **Additional Contributions:**
- Trained Support staff by building SOPs and documentation
- Conducted site visits for **auditing system performance, addressing concerns, and liaising with clients to provide technical support** and ensure smooth deployment.

Decision Analytics Associate   *6/2021 – 3/2022*
ZS Associates (Gurugram)
Built **data analytics dashboards** for pharmaceutical forecasting, delivering insights via Python (Pandas, NumPy) and Power BI. Helped optimize decision-making for a major biopharmaceutical client. (IPSEN)
Tech Stack: Python, Pandas, NumPy, Power BI, Excel

Technical Management Trainee   *9/2020 – 5/2021*
Cargill India (Gandhidham)
Managed mechanical engineering projects, **including the development of a chemical interesterification plant**. Led contractor teams, audited safety and work permits, and ensured compliance with design standards.
Responsibilities: Project management, safety audits, contractor coordination , Material management , **Piping And Instrumentations Diagram Consolidation , Reporting**

GitHub Projects:

- **React Responsive Portfolio** (React.js) A **Responsive** single page website **(Frontend)** Source Code
- **IMDB Website** (JavaScript , React. , Redux) A Responsive movie , tv-show Imdb clone website Source Code
- **Blogging App API:** (Restful API ,Java, SpringBoot) **(Backend API)** Source Code
- **Hospital Manager :** (Java , JSP , Servlet , JDBC) **(Full Stack)** Source Code
- **Ecommerce App :** (Python , Django , Javascript ,Ajax , JQuery) **(Full Stack)** Source Code
- **ToDo List App :** (Python , Django , JavaScript) **(Full Stack)** Source Code
- **50 Days 50 FrontEnd Projects :** (HTML ,CSS , JavaScript) **(Frontend)** SourceCode

Extra Curricula's

- Part Of College Debating Soceity (DEBNEXUS) (2017)
- Participated in Techriti IIT Kanpur And Won 15000 Rs cash prize for Egg Drop Design Challenge (2017)
- Actively Organized and Managed Cultural and Technical Fests and events in college (2016 - 2020)
- Member of Training And Placement Cell in college (2019)
- Qualified AFSB Dehradun Selection Process for National Defense Academy (2016)

Strength's

- Excellent Soft skills , Speaking skills , Leadership and management skills
- Strong Believer in team work

Education

Degree	School/College	Grade
B.Tech (Mech Engg.)	**Harcourt Butler Technical University Kanpur** (erstwhile HBTI) **(2016 – 2020**)	73.83 %
12th	Delhi Public School Meerut **(CBSE – 2015)**	91.4 %