

# Khushwant

+91 880 0170 875 | [khushwant0328@gmail.com](mailto:khushwant0328@gmail.com) | [LinkedIn](#) | [GitHub](#)

## EDUCATION

**Delhi Technological University**

*B.Tech in Software Engineering; CGPA: 8.92*

New Delhi, India

2020 – 2024

## TECHNICAL SKILLS

**Languages:** Java, JavaScript, TypeScript, C/C++, SQL, HTML, CSS

**Frameworks & Libraries:** Spring Boot, Angular, React, Bootstrap, Tailwind CSS, Material-UI, PrimeNG

**Backend & Tools:** RESTful/SOAP APIs, Microservices, Apache Kafka, Redis, OAuth 2.0, JWT, Log4j2, Postman, IntelliJ, VS Code

**DevOps & Cloud:** AWS (EC2, RDS, S3), Git/GitHub, SVN, CI/CD(basic)

## EXPERIENCE

**Software Engineer**

*Iffco Tokio General Insurance*

July 2024 – Present

*Gurugram, India*

- **Product Management Dashboard:** Designed and developed a scalable internal dashboard to streamline product approvals and collaboration, cutting product approval cycle time by **50%**.
  - Engineered dedicated **real-time chat** channels for each product request using **WebSockets**, enabling faster stakeholder communication and reducing approval delays by **65%**.
  - Implemented **Role Based Access Control (RBAC)**, **JWT authentication**, and **AES encryption (CryptoJS)** to enhance data security and ensure compliance, reducing unauthorised access risks by **38%**.
  - Enhanced the **email notification service** with **Apache Kafka**, streamlining product status updates and approval alerts, reducing manual follow-ups by **70%** and ensuring timely, reliable communication.
- **Bulk Upload Microservice - Crop Insurance Portal:** Built and integrated a high-performance microservice into the existing **Spring Boot** code, reducing bulk data upload time from **20 minutes** to **40 seconds (96.6% faster)**.
  - Developed the service in **Python**, utilising async I/O to achieve **6,000 records/sec** throughput and optimised data pipelines to efficiently process **millions** of records.
  - Automated the retry mechanism using **Spring Retry** and the **exponential backoff strategy**, ensuring **99.95% uptime**, reducing manual re-uploads by **40%**, and maintaining data integrity in high-volume environments.
- **Keyword Search Microservice:** Designed and deployed a custom search engine using the **Elastic Stack (Elasticsearch, Logstash, Kibana)** to enable fast, scalable keyword-based search across purchase order records.
  - Reduced query response time by **75%**, enabling real-time analytics and dashboards for procurement teams.
  - Integrated **Redis** as a caching layer for frequently queried search results, offloading **Elasticsearch** and reducing query response times for high-demand searches by **62%**.
- **HRMS Modernisation:** Led end-to-end migration of the legacy HRMS platform from **Oracle Forms** to a modern **Java Spring Boot + Angular** stack.
  - Improved system performance by **20%** and reduced maintenance overhead by replacing outdated tech.
  - Enabled self-service HR operations for **5,000+ employees**, enhancing user experience and operational efficiency.

## PUBLICATIONS

- **AI vs AI: Deciphering Deepfakes with CNN and Vision Transformers**, by Khushwant, M. Gautam, and S. Meena, in *Intelligent Computing and Communication Techniques*, CRC Press (Taylor & Francis), **2025**. DOI: 10.1201/9781003530190

## POSITIONS OF RESPONSIBILITY

**President** | *Rotaract Club of DTU Regency*

July 2023 – June 2024

- Led a team of **250+** members across departments, directed a **Mega Donation Drive** in partnership with the **Turkish Embassy**, collecting **60+ kg** of relief material and raising **INR 20,000+** in funds.
- Organised large-scale fundraising events for NGOs including **CanSupport**, **Blind Relief Association**, and **GyanKunj**, reaching an audience of **35,000+**.