# UTSAV KRISHNATRA

## Full Stack Software Engineer

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## TECHNICAL SKILLS

- **Core Competencies:** Scrum, Agile, Design Patterns, Development Methodologies, Project Lifecycle Management.
- **Programming Languages:** JavaScript (ES6), TypeScript, Python, Java, C.
- **Web Frameworks/Runtime Environments:** React JS, NodeJS, Next.JS, Spring Boot, Spring MVC, Spring Security.
- **Databases:** Microsoft SQL Server, MongoDB, Cosmos DB, Firebase, MySQL.
- **Data Formats and Interface Protocols:** JSON, YAML, XML, REST API, GraphQL.
- **Cloud, CI/CD Tools and Version Control:** Azure, Docker, Kubernetes, Jenkins, SVN, GIT.
- **Messaging Systems and Testing Frameworks:** RabbitMQ, Kafka, Jest, JUnit, Mockito.

## EDUCATION

### Master of Applied Computing (*University of Windsor*)

📅 Jan 2023 – April 2024                               📍 Windsor, Ontario, Canada

### Bachelor of Information Technology (*Guru Gobind Singh Indraprastha University*)

📅 Aug 2016 – Oct 2020                                📍 New Delhi, India

## WORK EXPERIENCE

### Software Developer

**Tata Consultancy Services**

📅 Apr 2021 – Nov 2022                                📍 Bengaluru, India

- Led Agile teams in analyzing complex LMS requirements, architecting scalable solutions, and implementing efficient designs using OOP principles, resulting in a 20% boost in development efficiency and a 30% increase in team productivity.
- Developed a scalable microservices architecture using Node.js, Kubernetes, and Istio. Ensured high availability and fault tolerance through clustering and load balancing.
- Implemented PostgreSQL database structures and indexing strategies for asset inventory management, enabling real-time tracking and analysis.
- Created function-based components for course catalog, profiles, and tracking using ReactJS and TypeScript. Integrated Chart.js for data visualization, and ensured responsiveness resulting in 30% user experience enhancement.
- Designed and implemented a secure and scalable RBAC (Role-Based Access Control) system, leveraging Auth0 and Azure Active Directory for cloud-based identity and access management, designed to support a user base of over 1 million.
- Experienced in designing and implementation of continuous integration, delivery, and deployment through Jenkins.
- Utilized JUnit and Mockito for testing and debugging.

### Software Developer

**Flipspaces**

📅 June 2020 – March 2021                             📍 Delhi NCR, India

- Developed the Application layer, business logic layer, and data access layer using Next.js, TypeScript, and MongoDB, tailored for an intermediate startup environment.
- Implemented CI/CD pipelines using tools like Jenkins and Docker for automated build, test, and deployment processes, enhancing development efficiency and team collaboration.
- Designed and optimized MongoDB database schemas, utilizing aggregation pipelines to achieve a 30% increase in query performance and reduced latency in cloud environments.

- Designed, developed, and built applications using React and Redux, consuming payloads received from Node.js and Express backend APIs.
- Utilized RESTful API design principles for web services implementation, ensuring scalable and efficient communication within the system.
- Implemented SEO strategies including keyword optimization, metadata enhancement, and content refinement, resulting in a 25% increase in website visibility and a 30% rise in organic traffic.
- Implemented Redis caching, resulting in a 40% reduction in page loading times and a 30% decrease in database queries, leading to significantly faster website performance and improved user experience.
- Implemented Jest for automated testing in a Docker-managed project, ensuring the reliability and quality of React-based website templates.

## Software Developer

**Ernst & Young**

📅 Jan 2020 – May 2020                                            📍 Gurugram, India

Here are the revised points, each condensed to a maximum of two lines:Conducted security analysis using Agile methodology and Jira for National Housing Bank, defining security goals and assessing technical needs. Developed a Django-based web scraping app with BeautifulSoup and Scrapy, using MongoDB to store vulnerability reports as JSON data. Implemented Django backend for security and scalability with REST APIs, automated risk alerts, and integrated Chart.js for dashboard visualizations. Streamlined workflows and improved efficiency by automating CI/CD processes with Jenkins and design patterns.

## Software Developer

**Upwork**

📅 Jan 2019 – Dec 2019                                            📍 Remote

- Developed authentication, profile pages, product lists, details, and checkout pages using MVC architecture. Built an admin portal for product tracking, updating, and maintenance with modular components for scalability.
- Utilized MongoDB with Mongoose for structured schema design, enhancing data storage efficiency. Integrated Stripe payment gateway with webhooks for secure transactions and real-time updates.

# PROJECTS

### 💻 PDF ANSWERS
**Technologies: Shad-cn, Webhooks, TypeScript, Next.js 14, Zod, Prisma ORM, tRPC, React Query, Tailwind CSS**

📅 Apr 2024 – Jun 2024

- Developed a SaaS platform with Next.js 14, React, Prisma, tRPC, and Tailwind CSS for efficient and scalable application development. Integrated AI capabilities using Langchain and Google Gemini Pro for seamless PDF interaction.
- Utilized React Query for caching, intersection observer, eventual consistency, and optimistic updates, enhancing performance and ensuring smooth, responsive application behavior.

### 💻 Client-Server mini-Bash Application for Linux (Team Project) | University of Windsor
**Technologies: C, C++, Socket Programming, Process Control, Threads, Linux Shell Scripting, Unix File I/O**

📅 Jul. 2023 – Aug. 2023

- Developed a client-server application with robust file management features, providing efficient retrieval, filtering, and search commands. Ensured seamless socket-based communication and thorough user command validation to enhance functionality.
- Performed load balancing, optimizing resource utilization by having the server handle the first 6 client connections and the mirror taking the next 6, ensuring enhanced performance.

### 📖 Usage of Two-Dimensional (2D) Figures and Proposed 3D Geometry in Encryption and Decryption | SSRN

📅 Apr. 2020