



YUGAL KAUSHIK

Software Engineer passionate about distributed systems, scalable applications and open-source contributions


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 New Delhi, India

 GitHub

 Portfolio

 LinkedIn

EDUCATION

Shree Guru Gobind Singh Tricentenary University

Gurugram, India

Bachelor of Technology in Computer Science and Engineering

2022 - 2026 | Relevant Coursework: Data Structures & Algorithms, Operating Systems, Computer Networks, Database Management Systems, Object-oriented Programming, Software Engineering

EXPERIENCE

> PERSIST VENTURES | WEB DEVELOPER INTERN

August 2024 - September 2024

- Built production-ready analytics dashboard with Next.js SSR architecture, TypeScript type safety, and Recharts visualization suite handling 1000+ concurrent data updates with real-time chart rendering and 25% increased user session duration.
- Debugged backend integration challenges by resolving CORS policy issues, optimizing API endpoints reducing query time by 45%, and implementing robust error handling ensuring stable analytics performance.

PROJECTS

> WHISPERSPACE: Ephemeral Messaging Platform [GITHUB]

(React.js, TypeScript, Node.js, Socket.io, MongoDB, OAuth)

Built privacy-first real-time messaging platform serving 50+ concurrent users with ephemeral message storage eliminating 90% database overhead, Google OAuth authentication, Socket.io WebSocket communication managing dynamic rooms with automated cleanup, and Vite build optimizations including tree shaking, code splitting, and HMR for enhanced performance.

> P5.JS WEB EDITOR CONTRIBUTIONS [GITHUB]

(React.js, JavaScript, AWS S3, Internationalization, Accessibility)

Enhanced p5.js web editor functionality through 8+ merged pull requests including image upload via URL implementation, keyboard navigation accessibility fixes, UI improvements with tooltips and terminology updates, comprehensive translations for Library Management and documentation improvements contributing to open-source project with 1.5K+ GitHub stars.

> SPARKLE: Scalable Commerce Engine [GITHUB]

(React.js, Node.js, MongoDB, JWT)

Developed scalable e-commerce platform tested by 50+ users with secure JWT authentication, RESTful API architecture, dynamic shopping cart and React optimization techniques including code-splitting and lazy loading achieving 40% faster page loads.

> B+ TREE DATABASE ENGINE [GITHUB]

(C++, File I/O, Data Structures)

Engineered high-performance database storage engine implementing B+ Tree indexing algorithm in C++ with optimized disk-based tuple storage, indexed file retrieval system, and efficient range query processing for fast data access and minimal I/O operations.

> THE CIPHER: Retro Newspaper Design [GITHUB]

(Next.js, TypeScript, TailwindCSS, CSS Animations)

Crafted pixel-perfect retro-themed newspaper website showcasing advanced CSS styling techniques, custom animations and hover effects, responsive grid layouts, typography design, and interactive visual elements achieving 100% mobile compatibility and 2.5-minute user engagement through pure design appeal.

SKILLS

Programming Languages: C++, JavaScript, TypeScript, HTML5, CSS3

Frontend Frameworks: React.js, Next.js, Vue.js, TailwindCSS, SCSS

Backend Technologies: Node.js, Express.js, REST APIs

Databases: MongoDB, MySQL

Development Tools: Git, GitHub, Docker, AWS S3, Postman, ESLint, Prettier

Specialized Skills- Full-Stack Web Development, Real-Time Systems, API Design & Integration, Performance Optimization, Open-Source Development, Problem-Solving & Debugging

ACHIEVEMENTS

Hackathons - College Hackathon 2024 Category Winner & Overall Runner-up 2025, leading team of 4 developers

Summer of Bitcoin Bootcamp - Completed intensive blockchain development program and gaining hands-on experience

Active Open-Source Contributor - Made 40+ meaningful contributions across multiple repositories, primarily focused on web development tools and platforms. Contributed to well-known organizations including the Processing Foundation, OpenMRS, and Kiwix.

EXTRACURRICULARS

Co-Ordinator, University Code Club

Organized and led 12+ coding workshops and hackathons across campus, fostering technical collaboration among 200+ computer science students and mentoring junior developers in modern web technologies and open-source contribution.

Project Contributor Guide, Social Summer of Code

Assisted participants in making their first open-source contributions by reviewing pull requests, offering technical guidance, and helping them understand GitHub workflows, issue tracking, and project documentation.

CERTIFICATES

JP Morgan Chase Co. Software Engineering Certification

Postman API Fundamentals Student Expert Certificate

Geekster Certificates: SQL basic to advance, Git and GitHub, Mastering JavaScript Fundamentals