

ATHARVA RASANE

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PROFESSIONAL SUMMARY

Software engineer with 2+ years of experience specializing in backend development and cloud-native applications. Proficient in building production-grade SaaS platforms and distributed systems, with expertise in multi-tenant architectures, API performance optimization, and Kubernetes orchestration. Currently seeking roles as a Backend Engineer or Cloud Engineer, leveraging skills in OAuth2, Redis, and AWS to enhance system scalability and reliability.

EDUCATION

University of Colorado - Boulder <i>Master's, Computer Science</i>	August 2025 - May 2027 <i>GPA: 3.85</i>
KLE Technological University <i>Bachelor's, Computer Science</i>	December 2021 - June 2025 <i>GPA: 9.33</i>

PROFESSIONAL EXPERIENCE

University of Colorado - Boulder <i>Barista</i>	United States <i>September 2025 - Present</i>
<ul style="list-style-type: none">Prepared lattes, chai, and refreshers while maintaining quality, safety, and speed-of-service standards in a high-volume environment.Supported store operations including food warming, order accuracy, and customer service; followed SOPs and health/safety guidelines.	
Dasouk Private Limited <i>Full-Stack Developer Intern</i>	Remote <i>August 2023 - October 2024</i>
<ul style="list-style-type: none">Built and owned backend APIs and multi-tenant infrastructure for a production e-commerce SaaS platformDesigned and implemented authentication and authorization systems using OAuth2/JWT, RBAC, and IP allowlistingImproved API performance and backend latency, reducing median TTFB by 38% via caching and query optimizationDeployed and operated production services on AWS EC2 behind Nginx; automated deployments and supported basic incident responseBuilt internal platform tooling (no-code storefront engine) to reduce developer dependencyMentored 4 interns, leading Agile ceremonies, sprint planning, and stakeholder demos	
Cubiccode Digital Media LLP <i>Full-Stack Developer Intern</i>	Belagavi, India <i>September 2022 - February 2023</i>
<ul style="list-style-type: none">Delivered 7 production websites end-to-end (4 static, 1 Express catalog, 2 WordPress); owned requirements, implementation, launch, and client handover.Captured requirements, defined timelines and acceptance criteria; implemented SEO fundamentals, analytics verification, and deployment handoff documentation.Built and deployed an embedded website chatbot; contributed to training materials (setup docs, Q&A sessions).Organized Google DevFest 2022 (Belagavi): sponsor coordination, competition operations, and event branding assets.	

PROJECTS & OUTSIDE EXPERIENCE

Cloud Gaming Service — Kubernetes-based On-Demand Sessions

Backend & cloud infrastructure for on-demand, low-latency interactive workloads using Kubernetes

- Designed on-demand game sessions with one isolated Kubernetes pod per user, orchestrated via a custom control plane (Session Manager + Redis queue).
- Implemented browser-based real-time streaming using WebRTC, achieving 40–60 ms end-to-end input latency.
- Engineered persistent cloud saves using read-only shared volumes plus per-user read/write volumes, surviving pod restarts and rescheduling.
- Measured 22–27 s cold-start time for dynamic session provisioning on GKE with node autoscaling
- [Link to project](#)

GitHub/GitLab Platform Clone — Kubernetes + Ingress Auth

Scalable backend platform for source control, authentication, and multi-user collaboration

- Built a self-hosted GitHub/GitLab-style platform on Kubernetes with Ingress-based authentication and repository-level access control.
- Implemented native Git protocol support, enabling standard git clone/push/pull workflows backed by bare repositories on persistent volumes.
- Designed for horizontal scaling with stateless backend replicas behind Ingress while maintaining repository consistency through shared storage.
- Developed a Next.js frontend for account creation, repository management, and collaboration/Q&A, backed by MongoDB.
- [Link to project](#)

LCP Library — Next.js DRM-enabled EPUB lending

Backend service for secure digital content lending with access control and license enforcement

- Implemented Readium LCP DRM (Digital Rights Management) with license issuance, renewal, and revocation, enforcing expiry checks before content delivery.
- Built with Next.js/Node.js, MongoDB (catalog + loan state), and stateless JWT sessions for secure patron access.
- Measured 180 ms average license issuance latency and validated correctness across common lending flows.
- [Link to project](#)

Real-World Event Causal Inference Pipeline — LLM-Based Abductive Event Reasoning

End-to-end NLP pipeline for causal reasoning and event selection using large language models

- Built an end-to-end abductive event reasoning pipeline for SemEval-2026 Task 12 (AERC), selecting the most plausible causal events from text.
- Integrated structured Chain-of-Thought (CoT) prompting, RAG (retrieval-augmented generation), and iterative feedback loops to refine predictions.
- Implemented semantic retrieval with Sentence Transformers to ground reasoning in contextually relevant documents.
- Generated structured CoT datasets for fine-tuning LLMs, improving event selection accuracy versus baseline prompting.
- [Link to project](#)

SKILLS

Skills: Ingress, Sentence Transformers, PM2, OAuth2, Cloud-native applications, Multi-tenant systems, E-commerce platforms, API performance optimization, Operational documentation, Incident triage, User stories, Stakeholder collaboration, FastAPI, HTML/CSS, MySQL, Oracle, Google Cloud Platform, AWS, Microsoft Azure, Redis, LLM, RAG, Linux/Unix, DevOps, Role-based Access Control, SEO, React.js, Next.js, Node.js, Python, LangChain, Excel/Numbers/Sheets

Languages: Hindi, Kannada, Marathi, English