

Curriculum Vitae

ATHARVA BAGUL

SYSTEMS & CLOUD ENGINEER

Nashik, MH, India

LinkedIn: [linkedin.com/in/atharva-bagul](https://www.linkedin.com/in/atharva-bagul)

GitHub: github.com/Atharvabagul84

Email: Bagul.atharva.manoj@gmail.com

Ph.: +91-853-056-2571

Professional Summary

Systems and cloud engineer with experience across full-stack cloud products, embedded Linux and cloud security. Builds multi-tenant SaaS features at DFDSOFT with TypeScript, Next.js, PostgreSQL and serverless cloud services, focusing on authentication, integrations and CI/CD. Previously on the founding team of a deep-tech UAV startup (embedded Linux, edge AI), with security internships covering AWS IAM, S3, CloudTrail/CloudWatch and incident response. Uses AI coding tools (Claude, Cursor, Codex) to turn complex specs into working code fast. Seeking DevOps and Cloud Engineering roles.

TECHNICAL SKILLS

- **Cloud & DevOps:** AWS (EC2, S3, Lambda, IAM, CloudTrail, CloudWatch), Google Cloud Platform, Vercel, Supabase, Docker, GitHub Actions, CI/CD.
- **Systems:** Linux, Red Hat Enterprise Linux, embedded Linux, VMware virtualization, edge computing, IoT telemetry.
- **Programming & Frameworks:** Python, TypeScript, JavaScript, C, SQL, PL/SQL, Verilog; React, Next.js, Node.js, Prisma, PostgreSQL, REST APIs; TensorFlow, Qiskit.
- **Security:** OAuth 2.0 / PKCE, role-based access control (RBAC), least-privilege IAM, IDS/IPS, SIEM, incident response.
- **AI & Agentic Development:** Model Context Protocol (MCP), tool calling, multi-agent workflows, prompt engineering, AI-assisted development (Claude, Cursor, Codex).

WORK EXPERIENCE

DFDSOFT – A DOGFOODDEV COMPANY

Remote

AI Dev Assist, Full-time

Sep 2026 – Present

- Full-stack and cloud engineering on SaaS recruiting and collaboration products using TypeScript, React, Next.js, Node.js, PostgreSQL and serverless cloud services.
- **Video recording & collaboration platform (created from scratch):** built browser-native capture (getUserMedia/getDisplayMedia, MediaRecorder, Canvas, Web Audio) with local-first recovery in IndexedDB and resumable uploads to private object storage (Supabase Storage, signed URLs).
- Implemented multi-tenant workspaces with role-based access control (RBAC), PostgreSQL Row-Level Security and serverless APIs on Vercel.
- Re-architected media processing from a Dockerized FFmpeg worker to in-browser MP4 encoding with direct upload, removing always-on infrastructure.
- **Multi-tenant applicant tracking platform (contributor):** Microsoft and Google OAuth 2.0 mailbox and calendar integrations, AI/MCP recruiting workflows, and GitHub Actions CI with regression, RBAC and HTTP checks against isolated test databases.
- **Recruiting & HR operations platform (contributor):** OAuth 2.0 authorization flow for an MCP connector with dynamic client registration, PKCE (S256), scoped, tenant-bound access and audit logging; CRM REST API sync with audit history.

ANTIMATRIX (FORMERLY SKYCIRCUIT INNOVATIONS)

Nashik, India

Founding Team Member & Lead R&D Engineer

Jun 2024 – Jul 2026

- Core founding team member of a deep-tech UAV startup, taking it from an idea to field-tested prototypes for defence and agri-tech across R&D, product development, embedded systems and partnerships.
- Worked on Grape, an integrated flight computer running embedded Linux for onboard edge AI/ML workloads and real-time telemetry.
- Contributed to an autonomous long-range quadcopter with an onboard AI accelerator (10 km range, 1 hr endurance) and a vision-based aerial monitoring system running real-time object detection at the edge, from hardware-software integration and sensor telemetry through field testing.

Curriculum Vitae

- Built the educational outreach wing: formalized an MoU with Sandip Foundation and ran hands-on workshops on UAV design, avionics and embedded programming.
- Prepared technical proposals and pitch material for VCs and government innovation programs (iDEX, Startup India, MeitY).

GOOGLE FOR DEVELOPERS

Nashik, India

Student Mentor, India Educators Program

Jan 2023 – Dec 2023

- Mentored university students in machine learning with TensorFlow, Generative AI on Google Cloud, and Android and web app development, helping them move from concepts to working implementations.

QWORLD

Remote

Research Intern, Research & Development Group

Jun 2023 – Oct 2023

- Researched stakeholder values in quantum technology using Value Sensitive Design, through interviews and workshops with grassroots quantum communities, and analyzed its social and economic impact.

GOOGLE CLOUD COMMUNITY INDIA

Nashik, India

Mentor – Education

May 2022 – Jan 2023

- Trained and mentored university students in Google Cloud infrastructure, Big Data and machine learning on GCP, including Google Cloud security and AI services.

VIRTUALLY TESTING FOUNDATION, LOS ANGELES, CA, USA

Remote

Intern, Cyber Security Engineer

May 2022 – Jul 2022

- Worked with IDS/IPS and SIEM tools in a virtual lab to detect and analyze security events; practiced incident response and forensic investigation, including malware analysis.

Cloud Security Associate

Jul 2021 – Oct 2021

- Applied IAM least-privilege access patterns and reviewed policies to fix common misconfigurations; configured and validated S3 encryption and access controls.
- Troubleshoot AccessDenied errors across IAM and S3 policies; used AWS CloudTrail and CloudWatch for security logging and incident investigation.

Intern, VMware Security Audit and Reporting

Jan 2021 – Apr 2021

- Assisted security audits of VMware virtualization environments and wrote improvement recommendations with the security team.

EDUCATION

B.Tech, Computer Science Engineering, Sandip University, Nashik, India

Aug 2020 – Jun 2024

Diploma, Quantum Computing and its Application, University of Latvia, Riga

Sep 2023 – Jun 2024

Diploma, Global Quantum Computing Program, Womanium Quantum, Washington, DC

Jun 2023 – Oct 2023

PUBLICATIONS

[1] Atharva Bagul, Anand Singh Rajawat, S. B. Goyal. "RISC-V SoC Design for IoT: A Survey of Open-Source Cores and Applications." TechRxiv, December 12, 2024. DOI: [10.36227/techrxiv.173397952.21406854/v1](https://doi.org/10.36227/techrxiv.173397952.21406854/v1).

[2] Atharva Bagul, Diksha Mahajan, Smita Gohil, Tarun Suryawanshi, Pushpalata Aher. "Exploring the Potential of Open-Source RISC-V Cores for Low-Power IoT Devices." *International Journal of Emerging Technologies and Innovative Research (JETIR)*, Vol. 11, Issue 5, May 2024, pp. g129–g144.

VOLUNTEER LEADERSHIP

RISC-V INTERNATIONAL

Individual Member, Certification Steering Committee

Sep 2023 – Present

- Participate in weekly committee meetings on RISC-V certification standards development and refinement.

QINDIA, QWORLD

Student Member

Jun 2023 – Present

- Support quantum computing awareness through outreach activities and educational discussions.

AWARDS

- **Womanium Scholarship**, Global Quantum Computing Program | Womanium (2023)
- **IBM Quantum Challenge: Spring 2023 Achievement** | IBM (2023)
- **IBM Quantum Excellence Award**, Qiskit Global Summer School | IBM (2023)
- **SunHacks 2022 International Hackathon**, FinTech – 1st runner-up (team) | Sandip University & ESDS (2022)