Abhayprad Jha

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Education

William & Mary, Williamsburg, Virginia

2022-Present

- Ongoing, BSc. Computer Science, BA. Economics
- Relevant Coursework: Data Structures, Algorithms, Software Development, Understanding Large Language Models, Applied Cybersecurity, Principles of Programming Languages, Linear Algebra, Econometrics, Principles / Methods of Statistics

Work Experience

Venture Capital Intern, Black Pearl Global Investments

June-July 2025

- Identified and established relationships with 15+ strategic partners and 30+ limited partners, coordinating outreach and communication strategies.
- Utilized LLMs to automate analysis and technical documentation review, synthesizing insights from startup pitch decks and technical specs.
- Engineered a proof-of-concept proposal for an AI automation system for the CIO, detailing a scalable architecture for processing financial data and ensuring high data integrity throughout the due diligence lifecycle.

Intern, Deloitte January 2025

- Performed in-depth market analysis leveraging data analytics to evaluate consumer behavior trends across South Asia.
- Developed actionable insights and delivered technical keynote to SMEs and industry leaders, driving strategic alignment.

UX Design Intern, Tata Consultancy Services

May-August 2024

- Conducted user and market research on the lithium-ion battery supply chain to define problem statements and guide development.
- Led end-to-end design, documented design-system components that cut time-to-spec by 25% and improved handoff.
- Turned supply-chain interviews into a Figma prototype with compliance acceptance criteria, enabling CTO sign-off and a scoped build path; rework down 30% in early engineering cycles.
- Authored and presented a white paper on the design rationale and research findings, successfully advocating for the proposed solution to the CTO.

Organizations and Projects

Research Assistant, SBOM Tool Analysis

2025-Present

- Conducted comparative analysis of 15+ SBOM generation tools across Python, JavaScript, Java, and Go ecosystems, quantifying dependency identification accuracy and completeness through systematic testing.
- Engineered automated frameworks to evaluate SBOM tool performance, identifying coverage gaps and documenting metadata capture capabilities across enterprise repositories.

Data Editor at The Flat Hat (college newspaper)

2022-Present

- Founded and scaled the Data section from inception, establishing editorial processes and growing output to 20+ published articles annually through strategic planning and team coordination.
- Developed and implemented data visualization frameworks for Sports and News sections, streamlining inter-sectional collaboration and enhancing analytical storytelling across publications.
- Award: Region 2 Mark of Excellence Finalist for data journalism, awarded by The Society of Professional Journalists.

Itch (web app) 2024-2025

- Developed a full-stack music discovery platform using Node.js/Express and Svelte 5, integrating Spotify/Last.fm APIs and Firebase Firestore for real-time session management and user matching.
- Engineered a vectorized taste profile system with cosine similarity algorithms in JavaScript, optimizing match computations by 30% through caching and batch Firestore operations.

Skills

Technical Skills: Python, JavaScript/TypeScript, Java, C++, Rust, Elixir/Phoenix, Svelte, Svelte-Kit, Go, Astro, React, Next.js, Nuxt.js, SQL, Tailwind, MongoDB, Firebase, C, C#, R, React, Node.js, REST APIs, GraphQL, AI Agents/Agentic AI, LLMs, HTML/CSS, Responsive Design, Docker, LLM Integration, Prompt Engineering, Natural Language Processing, RAG Systems, Vector Databases, Git, Docker, CI/CD, Agile/Scrum, Linux, AWS/Firebase/Cloud Basics, Full Stack Development, API Design, Database Design Performance Optimization, Code Review, System Debugging, Technical Documentation, Crossfunctional Collaboration, Production Troubleshooting, Figma, Framer, Storybook, IATEX, Statistical Analysis, Unix/Powershell, CLI, Claude Code, GitHub Copilot, Gemini-cli

Languages: English (native), Hindi (native), Maithili (native), French (Intermediate)