

M.TAYYAB SOHAIL

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Software Engineer | Computer Scientist | Full-Stack Developer

PROFESSIONAL SUMMARY

Computer Science graduate with 2 years of experience in software engineering and applied systems development. Experienced in designing and building full-stack applications, scalable backend services, and real-time web systems. Strong foundation in algorithms, data structures, and system design with practical exposure to cloud deployment and software architecture.

EDUCATION

Bachelor of Science in Computer Science

Sep 2021 – Jun 2025

FAST NUCES, Islamabad, Pakistan

- **Dean's List: Semesters 7 & 8** (top academic performer in final year AI & ML coursework)
 - **Key Subjects:** Data Structures & Algorithms, Algorithm Design & Analysis, Database Systems, Operating Systems, Computer Networks, Artificial Intelligence, Software Engineering, Information Security, Cloud Computing.
 - **Final Year Research Project: PhysioVision — Real-Time Human Pose Estimation for Adaptive Physiotherapy**
 - Investigated real-time human pose estimation for rehabilitation monitoring by designing a computer vision pipeline using MediaPipe and OpenCV to extract structured joint trajectories for movement analysis under real-world conditions.
 - Developed a retrieval-augmented language model framework that maps pose-derived features into context-aware physiotherapy feedback, enabling automated interpretation of patient movement patterns with approximately ~95% joint detection accuracy under real-time constraints.
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WORK EXPERIENCE

Software Engineer — Bitsmiths Studio

Jul 2025 – Present

- **AI SEO Automation Platform — (<https://seomaven.ai>)**
Developed an end-to-end Next.js SEO platform integrating AI-powered content creation and automated publishing pipelines, increasing content throughput by **3×** while reducing manual tracking effort by **50%**.
- **Multi-Seller E-Commerce Marketplace — (<https://anina.app>)**
Designed a multi-tenant e-commerce platform with a modular backend, implementing product recommendations, payment workflows, and order management services, increasing user engagement by **40%** while reducing support tickets by **70%**.
- **Off-Campus Rental Marketplace — (<https://unibid.app>)**
Developed a real-time student rental marketplace using Next.js, implementing WebSocket-powered bidding, role-based dashboards, and automated notifications, supporting **1,000+ concurrent users** with **<200 ms** bid synchronization.
- **Real Estate Investment Platform — (<https://vestafi.co>)**
Engineered a full-stack fractional real estate investment platform with secure payment processing, automated ownership workflows, and a scalable marketplace architecture, significantly reducing manual administrative effort.
- **Bitsmiths Studio Website — (<https://bitsmiths.studio>)**
Developed and optimized the company's Next.js website, implementing responsive UI, technical SEO, and performance improvements that increased page speed and organic search visibility.
- **Human Resource Management System — (<https://hrm.bitsmiths.studio>)**
Built an enterprise HR platform featuring role-based access control, employee onboarding, leave management, payroll-ready data models, and secure document workflows, reducing administrative overhead through workflow automation.

Software Engineer — New Web Order — (<https://www.newweborder.co>)

May 2025 – Jul 2025

- Built and optimized a corporate website using Next.js, TypeScript, and Tailwind CSS, improving page performance by 40% through frontend optimization techniques and SEO restructuring

Software Engineer — Aawaz AI

Jun 2024 – Aug 2024

- Built an NLP-powered news scraping and risk-ranking system for **Bank Islami** to assess reputational and regulatory risk for Politically Exposed Persons (PEPs); enabled automated compliance monitoring for a banking client.

Software Engineer — IntegralX — (<https://snobbots.vercel.app>)

Jan 2024 – May 2024

- Developed a MERN-based multi-tenant white label chatbot system using retrieval-augmented generation (RAG) architecture, enabling scalable deployment of AI assistants across multiple client instances and reducing onboarding time by 60%.

SKILLS & TOOLS

- **Languages & Frameworks:** React, Next.js, TypeScript, JavaScript, Tailwind CSS
- **Backend & Databases:** Node.js, Express.js, PostgreSQL, MongoDB, Supabase, Firebase, Pinecone
- **Cloud & Deployment:** AWS, Google Cloud, Docker, Kubernetes, Vercel, Coolify, Render
- **Automation & DevOps:** n8n, Trigger.dev, Git, GitHub, CI/CD
- **Payments & Third-Party APIs:** Stripe, PayPal, OpenRouter, DataForSEO, Google Maps API

CERTIFICATES

- AWS Academy Graduate — [Cloud Web Application Builder](#) (Dec 2024)
- AWS Academy Graduate — [Cloud Data Pipeline Builder](#) (Dec 2024)
- AWS Academy Graduate — [Cloud Foundations](#) (Dec 2024)

EXTRACURRICULAR AND LEADERSHIP

- **Technical Vice Head, Google Developer Student Club (GDSC):** Led a 10-member Platform Development team; guided development of a vocal aid system for hearing-impaired individuals.
- **Operations Specialist, TEDx FAST NUCES:** Organized one of the university's largest annual events with approximately 5,000 attendees.