

Piyush Barik

Full-Stack Developer · AI Engineering · React, Next.js & .NET

United Kingdom · Open to remote and hybrid

Portfolio: piyushbarik.com · LinkedIn: linkedin.com/in/piyushbarik

ABOUT

Full-stack developer working across React, Next.js, TypeScript, and .NET / C#, with hands-on experience in Azure cloud, identity, and CI/CD. I build production web applications end-to-end — from accessible, performant frontends through to backend services, SQL data layers, and Azure-deployed infrastructure.

Actively focused on AI engineering: LLM APIs, RAG, agents, evaluations, and MCP integrations. Interested in product-focused engineering roles where frontend craft, backend depth, and applied AI overlap.

AI ENGINEERING — ACTIVE FOCUS

- LLM APIs — Anthropic Claude, OpenAI GPT
- RAG pipelines and retrieval design
- Agent design, tool use, and evaluations
- Model Context Protocol (MCP) — building and integrating servers
- Claude Code tooling, configuration, and rollout across development teams
- Production AI integration patterns: structured output validation, prompt design, secure API mediation

EXPERIENCE

Full-Stack Developer

Harneys Fiduciary · Oct 2025 – Present

- Build and ship client-facing web applications using React, Next.js, Vite, and TypeScript.
- Develop accessible, performant frontend components with reusable architecture.
- Maintain RESTful backend services in Python Flask and contribute to .NET service integration.
- Work with SQL Server, including schema design, query performance, and data warehouse work.
- Manage CI/CD pipelines on Azure DevOps for both frontend and backend deployments.
- Collaborate with product, QA, and design teams in an Agile environment.

Junior Frontend Developer

Lancaster University ISS Innovation Hub · May 2024 – Sep 2025

- Built and maintained accessible web applications using React, Next.js, and TypeScript.
- Contributed to the iLancaster mobile app using React Native, improving navigation and integrating AWS-powered features.
- Developed the Compassionate Schools Hub, including role-based dashboards and public-facing resource areas.
- Rebuilt the Probabilistic AI Hub on Next.js and Mantine UI, improving performance, scalability, SEO, and accessibility.
- Worked across AWS Lambda, GraphQL, REST APIs, .NET services, and Azure DevOps CI/CD.
- Used Jest for unit, integration, and end-to-end testing.

TECHNICAL SKILLS

Frontend

React, Next.js, Vite, React Native, TypeScript, JavaScript, Tailwind CSS, Chakra UI, Mantine UI, Styled Components, responsive design, accessibility (WCAG).

Backend

.NET, C#, Python Flask, REST APIs, GraphQL, Orleans framework.

Cloud & Infrastructure

Azure DevOps, Azure Kubernetes Service (AKS), Azure AD / MSAL, Azure Entra ID, .NET Aspire, AWS Lambda, API Gateway, S3.

Identity & Security

Azure AD SAML SSO configuration, MSAL authentication flows, JWT, Azure Key Vault.

Data

SQL Server (including data warehousing), PostgreSQL, MySQL, SQLite, MongoDB.

AI / LLM

Anthropic Claude, OpenAI GPT, RAG, agent patterns, MCP integrations, structured output validation (Zod), evaluations.

Testing & DevOps

Jest, Azure DevOps, GitHub Actions, CI/CD pipelines, code reviews, quality gates.

Tooling & Workflow

Claude Code (rollout and team enablement), multi-repo workflows, Git, Agile / Scrum.

SELECTED PROJECTS

SAIL Chatbot — Lancaster University Student Support

AI-powered student support chatbot built on .NET, Orleans, and OpenAI GPT, integrated with university APIs for enquiry handling, summarisation, and secure follow-up ticketing.

- AI-powered enquiry summarisation
- Secure API integration with JWT authentication
- Azure Key Vault for secrets management
- API Gateway-based service communication
- Distributed actor model via Orleans

Smart API Recommendation Tool

Final-year project using Next.js, Tailwind CSS, MongoDB, OpenAI, and Zod to recommend API management platforms based on user requirements.

- AI-powered recommendation engine
- Structured OpenAI output validation with Zod
- Analytics dashboards, feature scoring, pricing comparison
- Latency visualisation

Compassionate Schools Hub

Next.js platform supporting schools with mental health evaluation, training access, award submissions, and educational resources.

- Role-based dashboards
- Public resource hub and community scrapbook
- Accessible frontend design
- Secure user flows

Probabilistic AI Hub

Research-focused web platform rebuilt on Next.js and Mantine UI, deployed on AWS.

- Server-side rendering for performance and SEO
- Improved page performance and accessibility
- Cleaner UI architecture and component reuse

iLancaster App

Contributed to a React Native mobile application used by students.

- React Native feature development
- Timetable and notification integration
- Cross-platform navigation improvements
- UI/UX refinements

EDUCATION

BSc (Hons) Computer Science

Lancaster University · Graduated 2025

Relevant coursework: Distributed Systems, Artificial Intelligence, Internet Applications.

INTERESTS

AI systems and applied LLM engineering, developer tooling, cloud engineering, product design, Formula 1, exploring new technologies.

References available on request.