# Arsalan Bardsiri

949-612-5582 | arsalan.bardsiri@gmail.com | linkedin.com/in/arsalan-bardsiri | github.com/arsalanbardsiri

## PROFESSIONAL SUMMARY

Hybrid Full-Stack Software Engineer and QA Automation Expert with 3+ years of experience bridging the gap between software development and quality assurance. Specializes in building scalable, distributed web applications using **Next.js 16**, **TypeScript**, and **Node.js**, while ensuring production reliability through robust **CI/CD** pipelines and automation frameworks (**Cypress**, **Playwright**). Proven track record of reducing regression cycles and optimizing system performance in agile environments.

## TECHNICAL SKILLS

**Languages**: JavaScript (ES6+), TypeScript, Python, Ruby, SQL, HTML5, CSS3
**Frontend**: Next.js 16 (App Router), React 19, Tailwind CSS, Shadcn UI, Framer Motion, Redux
**Backend**: Node.js, Express, NestJS, Django, Sinatra, GraphQL, REST APIs, WebSockets
**Databases & Cloud**: PostgreSQL (Supabase/Neon), Redis (Pub/Sub & Queues), MongoDB, Docker, AWS
**QA & DevOps**: Cypress (E2E), Playwright, JMeter (Performance), GitHub Actions (CI/CD), Jest, PyTest
**Architecture**: Microservices, Distributed Systems, Event-Driven Architecture, Serverless

## EXPERIENCE

**Discovery Partners Institute (University of Illinois)**                    Remote / Hybrid
*Apprentice Software Developer*                    *Jan 2025 – Present*

- Developed enterprise-grade web applications using **React** and **Python**, focusing on scalable architecture and clean code principles.
- Collaborated in an Agile environment to deliver full-cycle features, from design to deployment, utilizing **Docker** for containerization.
- Implemented comprehensive unit and integration testing strategies to maintain 90%+ code coverage.

**Ecotrak Facility Management Software**                    Irvine, CA
*QA Lead & Automation Engineer*                    *Oct 2023 – Dec 2024*

- Engineered a robust test automation framework using **Cypress** and **JavaScript**, reducing manual regression testing time by **40%**.
- Designed and implemented **CI/CD pipelines** via **GitHub Actions**, enabling automated testing on every pull request and accelerating deployment cycles.
- Conducted performance load testing using **JMeter** to identify database query bottlenecks, working directly with backend engineers to optimize SQL performance.
- Bridged the gap between product and engineering by translating complex requirements into precise test plans and technical documentation.

**Freelance / Independent**                    Remote
*Full-Stack Developer*                    *Jan 2022 – Present*

- Architected and deployed high-performance web applications for diverse clients using the **MERN stack** and **Next.js**.
- Integrated secure payment gateways (**Stripe**) and headless CMS solutions to deliver dynamic, content-driven platforms.
- Optimized frontend performance, achieving perfect Lighthouse scores for SEO and Accessibility.

## TECHNICAL PROJECTS

**Blog Lounge** | *Next.js 16, Redis, Express, PostgreSQL, Playwright*                    Jan 2025

- Built a distributed content platform implementing the **Cache-Aside pattern** with **Redis** to minimize database load and reduce API latency by 60ms.
- Implemented a custom **Rate Limiting** middleware using Redis sliding windows to prevent DDoS attacks and ensure API stability.
- Designed a "Distributed Desk" UI with drag-and-drop persistence using **Framer Motion** and local storage.

**ProjectIt V2** | *Next.js 16, Socket.io, Redis Adapter, Docker*                    Dec 2024

- Re-architected a legacy monolith into a microservices-ready platform, utilizing **Socket.io** with a **Redis Adapter** to support horizontal scaling of WebSocket clusters.

- Developed a custom background job queue using Redis to handle asynchronous tasks like email notifications decoupled from the main API thread.
- Ensured type safety across the full stack with **TypeScript** and **Zod** schema validation.

**Catlender** | *Next.js 16, Google Gemini AI, Supabase* <span style="float:right">Nov 2024</span>
- Created an AI-augmented task manager integrating **Google Gemini API** to act as an intelligent agent for schedule optimization and daily briefings.
- Leveraged **Supabase** for real-time data persistence and row-level security (RLS) policies.
- Designed a highly responsive, glassmorphic UI using **Tailwind CSS** and **Shadcn components**.

## EDUCATION

**University of California, Irvine** <span style="float:right">Irvine, CA</span>
*Full-Stack Web Development Certificate* <span style="float:right">2023</span>
**California State University, Northridge** <span style="float:right">Northridge, CA</span>
*Coursework in Computer Engineering* <span style="float:right">2016 – 2020</span>