Ahmad Khairul Anwar

https://www.linkedin.com/in/ahmad-khairul-anwar
ahmadanwarkhairul@gmail.com
ahmadkhairul.github.io
+6283822983690

Summary

Ahmad Khairul Anwar is a Senior Front-End Engineer with 10+ years of experience building and leading scalable, high-performance web applications across EdTech, government, and enterprise environments. Proven track record in leading front-end teams, defining clean and scalable architecture, and delivering products used by **1.1M+ users**.

Strong expertise in **React.js, Next.js, and modern front-end ecosystems**, with hands-on experience modernizing legacy systems, implementing automated testing strategies, and reducing production defects through CI/CD and quality standards. Comfortable working across legacy and modern stacks, with a strong focus on improving code readability, maintainability, and onboarding efficiency. Execution-driven engineer with growing emphasis on automation engineering and AI-assisted development, consistently delivering clean, test-driven, and production-ready systems.

Work Experience

Front-End / Support Engineer   **Pegadaian Indonesia**   **2025—Now**

- Provide front-end development support across multiple internal products and technology stacks, ranging from legacy systems (CodeIgniter 2 & 3) to modern stacks (React, Vue 3, NestJS, Express).
- Act as a cross-team quality and architecture support engineer, collaborating with multiple teams to debug, refactor, and stabilize complex codebases.
- Rapidly onboarded into highly complex financial business domains, including period closing and chart of account (COA) workflows, delivering production-ready solutions with minimal ramp-up time.

Key Achievements

- Improved performance of a critical financial module by identifying and eliminating an N+1 query issue, refactoring it into a recursive, depth-controlled query that reduced database calls to a single execution.
- Elevated code quality across multiple teams by implementing comprehensive unit testing practices (up to ~90% coverage), authoring a testing style guide, and creating onboarding documentation adopted as team standards.
- Stabilized and secured legacy CodeIgniter systems by fixing authorization vulnerabilities that allowed unauthorized page access.

Lead Front-End Engineer   **Telkom Indonesia**   **2020—2025**

- Led 4 front-end teams (1–3 engineers each), overseeing code quality, mentoring, and delivery across multiple EdTech products used by 1.1M+ users.
- Defined and implemented scalable front-end architecture, including micro-frontend patterns, to support long-term maintainability and parallel team development.
- Integrated 100+ REST APIs and maintained high test coverage (>80%) using Jest and React Testing Library, enforcing quality standards via ESLint and SonarQube.

Key Achievements

- Promoted to Front-End Lead and Codebase Maintainer, responsible for release quality and engineering standards.
- Built a scalable component system reused across 10+ projects, reducing development time by ~40%.
- Improved product insight and UX decisions through analytics integration (Google Analytics & Microsoft Clarity).

Web Programmer   **Karya Mitra Utama**   **2016–2019**

- Built custom web apps with JavaScript and CSS, automating workflows and reducing manual workload.
- Integrated IoT solutions to digitize processes and enable real-time monitoring.

    Key Achievements

- Reduced manual workload by 90%, boosting operational efficiency, delivered 3+ IoT-enabled systems used across business units and cut processing time by 50% through unified platform automation.

Web Programmer   **Sekolah Tinggi Teknologi Jawa Barat**   **2013–2016**

- Built IoT-enabled academic systems using JavaScript and CSS, cutting manual data entry.
- Digitized payments, records, and library systems for 200+ users.

    Key Achievements

- Eliminated 50% of manual workflows through digitization, enabled access to digital tools for 200+ students and staff and supported data accuracy and transparency with centralized systems.

Selected Project Experience

Klipxpert   2025
Founder & Full Stack Automation Engineer

- Engineered a fully automated short-form video pipeline using Python and FFmpeg as a recent personal automation project.
- Leveraged advanced pair programming with AI tools (ChatGPT, Claude, Copilot, and Lovable) to accelerate the full website development process from ideation and design to production-ready delivery reducing turnaround from 1 month to just 4 days.
- Adopted new technologies on the fly, including Supabase, Python, and multi-agent AI collaboration, boosting production efficiency by 50–80%.

Key Achievements

- Continuously optimized the automation engine, cutting video generation time from 1–2 days for 5 clips to under 30 minutes with improved quality and creative flexibility.
- Designed and deployed the KlipXpertID website for project management and automation control.

Pijar Sekolah Platform (EdTech Ecosystem)   2020 - 2025
Lead Front-End Engineer

- Led front-end development across a multi-module EdTech platform including online exams (CBT), student learning modules, teacher systems, analytics dashboards, and school subscription management.
- Delivered secure, responsive, and accessible web applications used by 1.1M+ users, supporting desktop, tablet, and mobile environments.
- Designed and implemented complex UI workflows (online assessments, grading, reporting, subscriptions) with a strong focus on performance, scalability, and UX consistency.

- Established automated testing practices (Jest, React Testing Library) to ensure long-term maintainability and reduce production bugs.
- Collaborated cross-functionally with product, backend, QA, and design teams to translate complex academic and business requirements into reliable production systems.

Key Achievements

- Computer-Based Test platform with anti-cheating mechanisms and multiple task types
- Student learning module with real-time notifications and payments
- Teacher academic system for grading, assignments, and virtual classes
- Analytics dashboards for schools and government stakeholders
- Subscription and operations dashboards for internal teams

Face Recognition Attendance App   2017
Front-End Developer

- Developed a face recognition system to replace card-based attendance, reducing fraud and manual HR work.
- Designed UX, integrated Kairos API, and built image capture with Photobooth.js.
- Delivered a real-time workforce management tool with IoT and biometric tracking, reducing HR manual workload — relevant for field workforce coordination

Key Achievements

- Eliminated 8+ hours of manual HR processing time
- Increased attendance accuracy with 90% face match rate
- Provided an all-in-one attendance and payroll solution

Skills

- **Languages**: JavaScript (ES6+), TypeScript, HTML5, CSS3
- **Frameworks**: React.js (Class & Functional Components), Next.js, Vue 3
- **State Management**: React Hooks, Redux Toolkit, React Query
- **Architecture & Performance**: Micro-Frontend, Module Federation, Lazy Loading, Webpack
- **Testing & CI/CD**: Jest, React Testing Library, SonarQube, Jenkins
- **Styling & UI**: Tailwind CSS, Emotion, Shadcn UI, Storybook, Laravel Blade
- **API & Integration**: REST API, Axios, JWT, Firebase (Auth, Realtime DB)
- **Backend Exposure**: Node.js, Express, Laravel, PHP
- **Mobile Development**: React Native
- **DevOps & Deployment**: CI/CD pipelines, Version control (Git), SaaS deployment readiness
- **Communication**: Bilingual – English & Indonesian, stakeholder alignment, design-to-dev handoff
- **Leadership**: Mentoring junior developers, conducting code reviews, onboarding new team members
- **User-Centric Mindset**: UI/UX research, accessibility best practices, user analytics (GA, Clarity)

Education

- **Bachelor Degree of Engineering, Sekolah Tinggi Teknologi Jawa Barat**
- **Vocational HS in Software Engineering, SMK Bhakti Nusantara 666**
- **Full stack JavaScript Bootcamp, Dumb Ways ID**