

# Kawish Hussain

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## Summary

Software Engineer with 5 years of experience specializing in the Next.js and React ecosystem. Expert in building type-safe, high-performance applications using Zustand, TanStack Query, and Zod to transform complex requirements into scalable UI. Proven track record in architecting secure proxy layers and AI-integrated workflows that bridge the gap between legacy backends and modern, intuitive user experiences.

## Skills

**Architecture & Core:** Next.js 16 (PPR, Server Actions), React 19, TypeScript (Advanced Generics), Ruby on Rails 7, React Native

**State & Data Orchestration:** Zustand, TanStack Query (v5), RPC Patterns, Server-side State Prefetching, Context API

**Form & Schema Engineering:** React Hook Form, Zod (Schema Orchestration), JSON-to-Form Dynamic Engines, Bi-directional Data Converters

**UI/UX & Design Systems:** Tailwind CSS (Utility-First), Radix UI, Framer Motion, Storybook (Atomic Design), Legacy-to-Modern Migration

**Systems & Performance:** API Proxying & Obfuscation, SSR, ISR, Streaming, Headless Architecture, ActionCable (WebSockets)

**AI & Tooling:** Human-in-the-loop (HITL) AI, AI Data Extraction, Git, Vercel, Bruno, ACORD Digitization

## Experience

### DataCrest

Full Stack Engineer

Philadelphia, United States, Remote

September 2022 - Present

- **Modernized the stack across 3+ major projects**, migrating legacy Bootstrap 3 monoliths to a utility-first Tailwind CSS architecture, which wiped out years of technical debt and CSS bloat.
- **Decoupled the Rails monolith into a headless backend architecture**, serving a high-performance Next.js 16 frontend to improve scalability and boost developer velocity.
- **Deployed a unified Design Language and UX framework** using Tailwind CSS and Radix UI, standardized user experience across products to reduce friction in core workflows and decrease the number of interactions needed to complete tasks.
- **Engineered an end-to-end PDF-to-Form digitization engine** that eliminated manual data entry; this system used a bi-directional sync to convert complex insurance docs into interactive forms and back, tripling the team's operational throughput.
- **Architected an AI-driven data extraction layer** that parsed unstructured PDF data into structured JSON, allowing the system to automatically analyze and route insurance data to external partners with 94% accuracy.
- **Built a "Human-in-the-Loop" (HITL) AI platform** for underwriters to verify AI-extracted data through a custom dashboard, which drastically accelerated the review process for high-risk applications.
- **Developed a real-time insurance orchestration engine** that dynamically calculates risk and generates instant quotes for prospects based on complex, multi-factor insurance logic.
- **Implemented a comprehensive Design System using Storybook**, organizing UI components into a version-controlled library that ensured 100% visual consistency across all different products both internal and external facing.
- **Scaled the platform to support the onboarding of Sapiens**, an enterprise-level provider, successfully managing the integration of hundreds of underwriting agencies into a single unified system.
- **Digitized hundreds of industry-standard ACORD forms** using internal AI models, turning static legacy documents into type-safe, validated digital workflows.

### Nice2Stay

Software Engineer

Haarlem, Netherlands, Remote

January 2022 - August 2022

- **Wrote the Rails backend services** for real-time hospitality data sync, which brought unsynced data rate down from 15% to **less than 1%** across the entire ecosystem of connected apps.
- **Built a custom icon font system** from scratch to replace 150+ heavy image assets; this kept the UI pixel-perfect while **cutting UI-related network requests by 80%** and shrinking the total app weight.
- **Slimmed the app down from 100MB to just 24MB** by stripping out legacy dependencies, updating old patterns, and moving heavy logic to the backend, resulting in a **75% faster initial load time**.
- **Set up Segment and Google Analytics** in the Vue.js app to track 100% of the user journey, identifying a friction point in the funnel that fixed to **increase user conversion by 12%**.

- **Built a pricing rule engine** using Rails nested forms and the Cocoon gem, which **reduced the time managers spent on configurations by 50%** and cut pricing-related errors by 40%.
- **Delivered real-time pricing capabilities** using Vue.js, allowing users to receive immediate responses when adjusting configurations, accelerating the update process by 3x compared to traditional workflows.
- **Implemented a calendar synchronization** system by leveraging multiple third-party APIs, automating the update of bookings across platforms to ensure accuracy and consistency in reservation data using Ruby on Rails and Vue.js.

## DevDen

Software Engineer

Faisalabad

July 2021 - Present

- **Re-architected a legacy Ruby on Rails UI** by migrating from Bootstrap to a custom Tailwind CSS framework, slashing page load times by 90% (from 3s to <300ms) and significantly improving Core Web Vitals.
- **Managed the core upgrade of Ruby on Rails monolith from version 5 to 7**, handling the full transition of the asset pipeline and middleware to support modern concurrent Ruby features.
- **Engineered a secure Next.js 16 orchestration layer** to proxy a Ruby on Rails API, obfuscating backend architecture from adversaries while leveraging PPR and Streaming to deliver a high-performance, near-instantaneous user experience with 100% end-to-end type safety.
- **Developed a schema-driven UI engine** using Zod and TanStack Query to dynamically generate complex forms from unified JSON metadata, eliminating redundant Form.io configurations and accelerating internal tool deployment by 70%.
- **Architected an automated data synchronization pipeline** to replace manual daily syncs, reducing data latency from 24 hours to near real-time and eliminating revenue loss caused by stale rental inventory and reservation conflicts.
- **Engineered a cross-platform React Native application** utilized by 700+ property managers globally, centralizing real-time booking management and support ticket workflows to drastically improve on-site operational agility.
- **Led the push for better guest data** by conducting discovery sessions with property managers, implementing OpenGDS integrations and occupancy-sync services that eliminated double-bookings and resolved 100% of data discrepancies in guest metadata.
- **Architected an end-to-end HR Management System (HRIS)** featuring AI-driven workflows that automated high-volume candidate onboarding, reducing administrative task time by 85% by transforming manual role assignments into a one-click process.
- **Designed a highly extensible HR architecture** supporting bespoke employee lifecycles and business logic, delivering a data-rich dashboard that optimized assessment completion rates for employees while providing stakeholders with granular analytics.

## Education

### Bachelor of Science in Computer Science

National University of Computer and Emerging Sciences

2017-2021

- Related Key Courses: OOP, Data Structures & Algorithms, Web Development.