BRANDON RAY

Senior Software Engineer | Mobile, Platform & Distributed Systems

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🎯 PROFESSIONAL SUMMARY

Senior software engineer with 15+ years designing, building, and operating distributed systems, from the factory floor to the cloud. At Walgreens I drive architecture and technical direction for a retail platform of 25+ mobile and web applications (20 of them Android) and 30 backend services serving 8,000+ stores, and I'm the escalation point when production breaks. I also founded Pixx, a group-dining app I build and run end to end, and I practice AI-first development daily with Claude Code and GitHub Copilot.

🛠️ TECHNICAL SKILLS

Languages & Frameworks: Kotlin, Java, TypeScript, Python, SQL, C#, Spring Boot 3, React, Jetpack Compose, Flask

Distributed Systems: Microservices, Event-Driven and Queue-Based Architecture, Kafka, REST APIs, Idempotency & Retry Semantics, Circuit Breaking, SAML 2.0 SSO, OAuth/JWT

Cloud & DevOps: Azure (AKS, Container Apps, PostgreSQL), Kubernetes, Helm, Docker, Bicep, GitHub Actions, Azure DevOps, Gradle (convention plugins, mono-repo)

Data: PostgreSQL, Oracle, SQL Server, MongoDB, Cosmos DB, Teradata, SSIS, SSRS, Flyway

Mobile: Android, Jetpack Compose, Kotlin Multiplatform, Coroutines, RxJava, Firebase

Quality & Operations: Dynatrace, Sentry, SonarQube, detekt, Kover, On-Call & Incident Response, Runbooks

💼 PROFESSIONAL EXPERIENCE

Walgreens | Senior Software Engineer
Feb 2024 – Present | Chicago, IL (hybrid)

Drive architecture and technical direction on a 12-person cross-functional team (engineering, QA, RunOps) for a distributed retail platform of 25+ mobile and web applications and 30 backend services serving 8,000+ stores.

- Consolidated 30 independently versioned repositories into a single Gradle mono-repo with a service-map-driven build and deploy system; packaged all 30 services as a Helm chart for AKS
- Designed the Azure Kubernetes landing zone (private API server, Azure RBAC, Cilium, workload identity with OIDC federation, firewall egress)
- Led the Spring Boot 3 / Java 17 / Kotlin migration of every JVM service, establishing patterns adopted across the organization
- Run the quality-gate program (detekt, Kover, SonarQube, 80% new-code coverage) enforced across every service through a shared Gradle plugin
- Architected backend platforms for retail systems: a SAML 2.0 SSO gateway with seven identity-provider integrations, real-time order fulfillment, in-store device orchestration, and queue-based cross-channel notifications
- Led development of several new applications from inception to production (architecture, PostgreSQL schema, DNS/TLS, cutover), then handed each to the team that owns it today with specs and runbooks
- Designed and built a chain-wide analytics pipeline end to end: a TypeScript SharePoint client and a Spring Boot collector feeding Dynatrace and Power BI
- Modernizing the 20 Android apps store associates use on handhelds with Kotlin and Jetpack Compose; designed Dynatrace release monitoring (crash-free, ANR, and rollback thresholds) for a fleet-wide store inventory app
- Escalation point for production incidents; built the service dashboard RunOps leadership adopted (health, TLS expiry, log tailing, smoke tests, and self-service deploys across 35 services)
- Brought AI-first development to the team with Claude Code and GitHub Copilot, and authored the strategy for keeping AI-written defects out of production

Pixx | Founder & Principal Engineer

Mar 2025 – Present | *pixx.fun*

Pixx is the app that picks the restaurant, so your group can stop negotiating and start eating. Founder and sole engineer, building and operating the whole platform.

- Live group-event coordination: invitations, RSVPs (including guests without accounts), scheduling polls, real-time voting and chat, and AI restaurant recommendations
- Kotlin Multiplatform iOS and Android app, React 19 + TypeScript web app, Spring Boot 3 API, Python ML ranking service (LightGBM), and React admin and advertiser portals on Azure
- External integrations (Yelp, Google Places, Gemini, Stripe, Twilio, SendGrid, Firebase) behind circuit breakers, retries with backoff, and caching; idempotent, signature-verified Stripe webhooks
- Production ownership end to end: Sentry release health on every service, Bicep infrastructure-as-code, GitHub Actions CI/CD with semantic versioning and coverage ratchets; 47 Maestro end-to-end flows on iOS and Android
- AI-first development: Claude Code agents across seven repositories, backed by per-repo architecture and standards docs and pre-push gates that mirror CI

Daugherty Business Solutions | Consultant – Software Engineer II, Software Engineer III

Nov 2020 – Feb 2024 | *Software Engineer II Nov 2020 – Aug 2023; Software Engineer III Aug 2023 – Feb 2024*

- Led Android platform development for Edward Jones, architecting secure authentication and self-service flows with Kotlin and RxJava while maintaining legacy systems and contributing to shared architecture across iOS and web
- Architected edge-to-cloud IoT pipelines for Anheuser-Busch connecting manufacturing equipment to Azure and Databricks; designed event-driven microservices that reduced latency 25% and sustained millions of daily sensor events
- Led migration of the Bayer Crop Sciences internal Android app toward a platform-agnostic architecture, eliminating device dependency for field operations

Enterprise Holdings | Software Engineer → Engineer 2

Nov 2016 – Nov 2020 | *Software Engineer Nov 2016 – Dec 2017; Senior Software Engineer (database and reporting) Dec 2017 – Jun 2018; Engineer 1 Jun 2018 – Dec 2019; Engineer 2 Dec 2019 – Nov 2020*

- Built and operated Android applications for 10,000+ rental locations covering returns, secure payment, and leasing flows
- Designed backend-for-frontend services in Java deployed to AWS and led the Kotlin migration across multiple enterprise applications
- Database and reporting work across Oracle, Teradata, and SQL Server; mentored junior developers and contributed to architectural planning across mobile and backend squads

Industrial Control Concepts (ICC, Inc.) | Manufacturing Systems Engineer

Jan 2015 – Nov 2016

- Architected a custom C# client-server analytics engine with a shared-memory architecture for real-time equipment data collection, outperforming commercial alternatives for 10+ clients including MillerCoors, Afton Chemical, and Diageo
- Delivered MES and plant-floor systems for Henkel, Reckitt Benckiser, Hollister, Conagra, Lamb Weston, Libman, Sealed Air, Paulo, Aisin, and Sage Clarity, programming PLC logic to collect OEE data and integrating with SCADA

Henkel Consumer Goods | IT Intern → Reliability Engineer

Jun 2011 – Jan 2015 | *IT Intern Jun 2011 – Jun 2013; Engineer Site Associate Jun 2013 – Feb 2014; Reliability Engineer Feb 2014 – Jan 2015*

- Worked across laundry detergent, air freshener, and bath and body soap lines; managed multiple $1M+ capital projects from concept through deployment, including IT infrastructure
- Built MES software and SQL Server applications that identified cost-reduction opportunities and resolved critical line performance issues, driving a 15% increase in production efficiency

EDUCATION

Bachelor of Science – Information Technology, minor in Computer Science | University of Missouri – Columbia | May 2014

Further details and professional recommendations available at brandonray.me and LinkedIn