

RYAN WILCOX

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Architect & Principal Engineer

Insightful and detail-oriented Software Architect with 20 years of experience in Software Development with a focus on delivering impactful software across a diverse set of platforms. Seen it all, phased by none of it.

TECHNICAL ACUMEN

Deep Experience in:	Javascript/Node (10 YOE) • Ruby on Rails (10 YOE) • Python (20 YOE) • AWS (8 years) • React (5 years) • Docker (5 years) • Terraform (2 YOE) • GCP (2 YOE) • C++ (5 years)
Core Skills:	Full stack development with specialization on backend services • DevOps / Automation / SRE experience • Platform Engineer • Accessibility & Security Compliance • Database Modeling across RDMS, NoSQL, Graph, columnar stores and time series datastores • Application Scaling • API integration (REST, GraphQL) • iOS • Technical Leadership Across Multiple Teams
Notable Back-End Languages & Tools:	Javascript (Node + Deno) • Ruby on Rails • Python • Kotlin • Groovy • TypeScript • HTML/CSS • Java (Spring Boot) • Kafka • Rust • Go • Swift • SQL • Smalltalk (Pharo) • Clojure • ...
Web & Front-End Technologies:	• React • Angular • Twitter Bootstrap • Gatsby.js • iOS Development with Swift / Objective-C
DevOps Tools:	Docker • AWS • Jenkins • CircleCI • GCP • Kubernetes • Helm • Terraform • Gradle • Vagrant • Vault/Consul • Ansible • Azure • Heroku

PROFESSIONAL EXPERIENCE

Enterprise Architect | AgFirst Farm Credit Bank **Nov 2023 – Present**

Technologies utilized includes: Azure Cloud; C#

Key Responsibilities:

- **Enterprise Architect for Cash / Payments Team:** the team responsible for ACH payments and products around customer loans and transfers
- **Designed, Prototyped, then mentored others on a Release Engineering Workflow** that gave us release visibility far beyond the current standards of the organization, while mentoring and growing engineers in artifact traceability
- **Contributed to R&D Efforts into Azure, AI/LLM** from beginning idea to ensuring production grade outcome

Staff Engineer (Platform Engineering; then Full Stack) | Apollo GraphQL **Nov 2021 – Nov 2023**

Technologies utilized includes: Kotlin, CircleCI, Terraform/Terragrunt, Gradle, GCP, Typescript, GraphQL (Kotlin, Java, Apollo Client)

Key Responsibilities:

- **Improved Continuous Delivery flow in CircleCI:** allowing developers to fully understand the scope of their changes and why, and easily deploy those changes to production
- **Cloud Cost Reporting:** prototyped, documented and scaled the specialized expertise that enabled teams to understand and control the cloud spend of their microservices
- **Reduce cross-team SDLC friction:** Our previous data ingest stack required coordinating three teams to release new versions of Apollo Federation. I replaced the solution (GCP Cloud Functions) with a Rust / Deno based solution which ensured version isolation (increasing system reliability), allowing one team to completely manage their release cycle, avoiding cross-team coordination.
- Use of GraphQL Java/Kotlin and Apollo Client to deliver full stack features for the Apollo Studio platform

Architect & Principal Engineer | Citizens Bank **April 2018 – Nov 2021**

Leads the development and maintenance for the Consumer mobile banking application, composed of 11 + full-stack “squads” building a microservice based distributed system. Focusing on engineering efforts to successfully migrate from an onsite Java application to a Cloud native Node.JS based microservices, and both DevOps platform and application architecture changes to move the project forward.

PROFESSIONAL EXPERIENCE (CONTINUED)

Technologies utilized includes: Node.JS, AWS, Java, JavaScript, Express, Jenkins, Spring Boot

Key Responsibilities:

- **Technical Leadership:** Leads multiple teams including a DevOps and cross functional Application development teams to execute client and organization goals. Championed and advocated for the rebuilding of the SDLC from the ground up to allow continuous delivery with a streamlined, agile, lean process and a culture of trust and shared responsibility while growing the team from 3-30 developers.
- **Architectural Design & Planning:** Evaluates and analyzes enterprise software solutions, providing support in planning, design, construction, and implementation of upgrades, maintenance, and migrations to enhance integration capabilities and strategize for future technological evolutions and tool integrations.
- **DevOps Engineering:** Supervises and Leads the ongoing support of project level Cloud infrastructure, and enterprise capabilities / mandates, exploring complex issues and implementing solutions in line with existing architecture.

Software Developer | Various Positions

2003 – Present

Key Responsibilities:

ESPN (2014-2018)

- **Software Development & Maintenance:** Supported software and infrastructure needs for ESPN's Next Generation Sports Data Ingest Platform Team needs. Overseeing experimentation with event streams, data from Sports events. **Technologies utilized includes: , Kafka/kStreams, Java with Spring Boot, TeamCity**
- **Lead architect and developer on a Backend For Frontend style application for the ESPN mobile apps.** Served 13M unique engagements a month, reduced request payloads by 30% and responsiveness by 300ms.
- **Full Stack Development:** Developed a number of internal or corporate customer facing full stack apps, deploying to iOS or React based UIs, using Node.js

Key Responsibilities

Various Consulting (2003-2014)

- **Full Stack Development:** Provided development support in a variety of languages, frameworks for teams ranging in size from 1 to 10
- **Mobile Development:** Leveraged extensive development knowledge to create mobile applications for iOS app stores. Independently resolved bugs, configured, and **deployed software written in Swift and Objective-C.**
- **Systems Analysis:** Provided analysis on existing codebases as part of startup due diligence or cost estimation efforts; Worked with about a dozen very early stage startups to define architectural requirements for RFP or effort level estimations.
- **Departmental Coordination:** Coordinated with various business units and departments to ensure Stakeholder requests received responses and necessary action within a timely and efficient manner.

HIGHLIGHTED PROJECTS & ACHIEVEMENTS

Key Projects Completed:

- Project Lead Application Engineer for 11 sub-teams, coordinating common tools, R&D, herd wide deprecation / adoption of technologies, while balancing stakeholder priorities communication styles, backlog schedules and providing business level translation for deep technical concepts. **Shipped mobile app with 1.3M user logins per day, backed by 100 microservices. Upon release / replacement of legacy app, the Appstore rating went from 2.4 - 4.3 stars.**
- Large workflow Rails app for Washington DC Public School system to manage special education complaints with very complex workflow / state management requirements.

Bachelor of Science in Management Information Systems | Rochester Institute of Technology