

RYAN WILCOX

rwilcox@wilcoxd.com / github: [rwilcox](https://github.com/rwilcox) / ryan.wilcoxd.com

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. Leverages innovative approach and comprehensive understanding of Backend development systems and architecture to expedite tangible-results.

TECHNICAL ACUMEN

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
Back-End Languages:	Javascript • Ruby on Rails • Python • Kotlin • Groovy • TypeScript • Objective-C • C • C++ • HTML/CSS • Java (Spring Boot) • Go • Swift • SQL • Smalltalk (Pharo) • PHP • Perl • Clojure • Scala • C#
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 • Heroku

PROFESSIONAL EXPERIENCE

Staff Engineer (Platform Engineering) | Apollo GraphQL Nov 2021 – Present

The Platform Engineering team at Apollo worked to decouple teams from past decisions that were no longer common industry practices, expose and solve pain developers were implicitly feeling, scale specialized expertise and set up Apollo for engineering growth in 2022.

Technologies utilized includes: Kotlin, CircleCI, Terraform/Terragrunt, Gradle, GCP

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
- **Enabled better use of cloud hosted solutions by developers:** prototyped and created development libraries for use of cloud solutions (from previously used single point of failure, or self hosted, solutions), operationalized and documented monitoring quirks found. Worked to understand costs of these solutions and performed cost/benefit analysis.

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.

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.

PROFESSIONAL EXPERIENCE (CONTINUED)

- **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.
- **Technical Troubleshooting:** Leverages extensive experience to predict root-cause of product integration problems, reducing troubleshooting time by accurately strategizing approach to testing and analysis.

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**
- **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.**
- Lead architect and developer on a Backend For Frontend style application for the ESPN mobile apps. This served 13M unique engagements a month, as it was used by ESPN's iOS, Android applications, **while reducing request payloads by 30% and increasing app responsiveness by up to 300ms when scrolling through the newsfeed..**
- Large workflow Rails app for Washington DC Public School system to manage special education complaints with very complex workflow / state management requirements. Project was created due to a class-action lawsuit, was developed on tight deadlines as (occasionally) failure to retain certain key workflow metrics would mean mandated layoffs for district educators

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