

RYAN MCPHERSON

Principal Software Engineer / Technical Architect

Sunbury, OH | (614) 981-3265 | ryanmcpersondev@gmail.com | linkedin.com/in/ryanandrewmcperson

PROFESSIONAL SUMMARY

Principal Software Engineer specializing in Java, distributed systems, identity & access management, and high-scale performance engineering. Known for delivering complex authentication and security solutions, leading cross-crew initiatives, and mentoring engineers across organizations. Strong record of improving resiliency, reducing operational cost, and driving architectural modernization.

EXPERIENCE

PNC Bank — Principal Software Engineer

Remote | Aug 2022 – Present

Tech: Java/Spring Boot, PingIdentity, Twilio, Daon IdentityX, Incode, OpenShift, Jenkins, Angular

- Led engineering across **three product crews**, delivering major authentication, onboarding, and security capabilities.
- Built a simplified, resilient **OTP platform** using Twilio Verify/Innovis, replacing multiple microservices and enabling automated vendor failover.
- Anchored onboarding of **Daon IdentityX**, **Twilio Verify**, and **Incode** identity verification solutions.
- Improved performance of a high-traffic authentication data management api by **10x**, reducing CPU and memory usage by **~90%**.
- Executed PingFed plugin migration PoC and onboarded teams to internal **Policy-as-Code**, documenting the process for department adoption.
- Early adopter of **agentic AI** across workstreams, developing reusable AI skills and workflows to drive engineering efficiency.
- Delivered multiple high-visibility, director-assigned projects requiring rapid problem solving and architectural clarity.
- Mentored **20+ engineers** through office hours, pairing, and TDD/debugging training; championed early GitHub Copilot adoption.
- Provided technical strategy and solution design guidance across crews, frequently consulted for complex cross-team challenges.

Bravo LT — Senior Software Developer

Remote | May 2021 – Aug 2022

Tech: Java, Spring Boot, AWS (EKS, EC2, S3, CodePipeline), Kafka, Oracle, DocumentDB, Splunk

- Replaced Java EE monolith components with Spring Boot microservices deployed from a mono-repo.
- Cached lookup tables using Caffeine, eliminating **billions** of annual database calls.
- Identified and resolved performance bottlenecks across microservices and message-driven systems.
- Established testing patterns and coding practices adopted across the engineering team.
- Supported production operations for a large monolith, dozens of microservices, and Kafka-based systems.

Accenture — Advanced App Engineering Sr Analyst

Columbus, OH / Remote | Sep 2019 – May 2021

Tech: Java, Spring Boot, Kafka, MQ, Angular, Kubernetes, OpenShift, MongoDB

- Served as de facto tech lead, pairing daily with engineers to unblock development and drive delivery.
- Conducted POCs for new technologies, testing strategies, and architectural patterns.
- Built and supported message-driven applications and full-stack web APIs for a major financial institution.

EDUCATION

B.S., Physics & Russian Languages and Literatures (Honors) — The Ohio State University (GPA: 3.32)

Certificate, Software Development — We Can Code IT