

Professional Summary

Senior Full Stack Engineer with 8+ years of experience designing and delivering scalable systems in the banking, credit union, and fintech domains. Deep expertise in **Java 11+**, **Spring Boot**, **microservices**, and **distributed systems**, as well as **.NET Core and C#**, with a strong background in cloud-native architecture (AWS/Azure). Proven technical leader who architected a **750K+ daily transaction ETL pipeline**, integrated real-time payment platforms (Zelle), and mentored 200+ engineers in enterprise Java standards.

Portfolio Website

<https://www.jonathanhop.com>

Education

M.A, Japan Studies, University of Michigan

B.A, Asian Studies, University of Michigan

Applied Agentic AI Program for Software Engineers – Interview Kickstart (2025)

Technical Skills

AI / ML: Agentic AI, LangGraph, RAG, Vector Databases, Embeddings, Prompt Engineering

Languages: Java (11+), C#, JavaScript/TypeScript, Python, Visual Basic

Backend & APIs: Spring Boot, Spring Data JPA, Hibernate, .NET (ASP.NET, .NET Core), Node.js, FastAPI, REST APIs

Architecture & Patterns: Microservices, Distributed Systems, ETL Pipelines, Message Queues

Frontend: React UI Development, Angular, Blazor, Next.js

Databases: PostgreSQL, SQL Server, MySQL, MongoDB, Redis

Testing: JUnit, Mockito, Jest, NUnit, xUnit, Selenium

Cloud & DevOps: AWS (S3, EC2, Lambda), Azure, Docker, Kubernetes, Terraform, CI/CD

Professional Experience

Pluralsight

April 2023 to Present

Senior Software Engineer

- Designed and implemented full-stack Java 11 / Spring Boot RESTful APIs, using layered architecture, and relational database integration.
- Built and maintained Spring Boot services with JPA persistence, unit and integration testing (JUnit, Mockito), and containerized deployments.
- Developed CI/CD pipelines and Git-based workflows to automate builds, testing, and deployment of reference applications, improving reliability and reducing manual setup for engineering teams

- Delivered technical instruction and upskilling to employees of Discover and CVENT, bringing 200+ employees up to speed on Java, SQL, and Agentic AI.

Infinicpt

August 2022 to April 2023

Senior Software Engineer (Left due to layoffs)

- Designed and deployed a distributed ETL pipeline processing 750,000+ daily financial transactions for a major banking client, emphasizing reliability, idempotency, and data integrity
- Led and mentored mid-level and junior developers and assisted in code reviews.
- Coordinated with different departments, product owners, and third party vendors to maintain project schedule.

Michigan First Credit Union

April 2020 to August 2022

Senior Software Engineer

- Led the full redesign and rebuild of the internal customer service application using Blazor, owned system architecture, implementation, and deployment after migrating off a third-party vendor, which improved response times and reduced support tickets
- Implemented Active Directory-based SSO to meet enterprise security requirements and rebuilt the front end in Blazor, improving performance, access control, and long-term maintainability
- Integrated Zelle payment services into the mobile banking application, supporting 380,000+ users and enabling real-time payments capability
- Implemented a Redis cluster to improve scalability and performance of the mobile banking platform, reducing database load during peak transaction periods
- Integrated Plaid for secure external account verification, enabling connectivity to external financial institutions and improving onboarding experience

Android Industries

May 2019 to April 2020

Full Stack Engineer

- Redesigned an internal IT ticketing system to streamline issue resolution workflows, reducing factory downtime and improving responsiveness for manufacturing operations
- Developed a mobile safety reporting application enabling real-time incident tracking and improving compliance with workplace safety and regulatory standards
- Designed and implemented an internal workflow automation platform for travel requests, including approval flows and automated notifications, reducing administrative overhead
- Contributed to internal applications used to track factory productivity metrics and automate operational reporting, supporting data-driven decision-making

Rocket Mortgage

October 2018 to May 2019

Software Engineer

- Refactored legacy applications to align with modern MVC architecture and dependency injection, improving maintainability, testability, and long-term code quality
- Increased automated test coverage to 80%+ across multiple applications by implementing unit and end-to-end tests, including Selenium-based test suites
- Designed and implemented an internal web application using ASP.NET, SQL, and Angular to manage MoveIT file transfer requests, improving visibility and reducing delays in cross-team collaboration

Process Automation Solutions

February 2017 to October 2018

Junior Engineer

- Developed Internal Company Website: Responsible for building software for internal company use to facilitate internal functions and increase efficiency

- Successfully deployed software to track employee utilization, deliver business intelligence using Google Charts, and project management

Technical Instruction and Mentorship (Part Time)

Grand Circus

January 2022 to December 2024

Coding Bootcamp Instructor

- Trained 50+ students in full-stack development in C#, JavaScript, SQL, React, TypeScript, and Angular, preparing them for junior developer roles.
- Developed a boot-camp program that equips aspiring developers with practical full-stack skills, helping graduates secure junior developer positions
- Assisted in curriculum development and creation of labs to make sure that what the students worked on was contemporary.

Michigan State University

August 2020 to September 2021

TA Web Development Boot Camp

- Served as Teacher's Assistant for two full-stack coding bootcamps, guiding 30+ students through hands-on labs in HTML, CSS, React, SQL, and GraphQL, and troubleshooting code using PostgreSQL and Angular, which helped students successfully complete the program
- Supported the instructor for Michigan State University's full-stack bootcamp, delivering labs on HTML, CSS, React, SQL, and GraphQL; leveraged PostgreSQL and Angular to build sample applications, and assisted students in mastering core concepts, leading to a high course-completion rate