

# Alexandra M. Carter

## Principal Java Engineer & Microservices Architect

Seattle, WA 98101

+1 (555) 014-8821

[alexandra.carter.dev@example.com](mailto:alexandra.carter.dev@example.com)

[linkedin.com/in/example-alexandra-carter](https://linkedin.com/in/example-alexandra-carter) | [github.com/example-acarter](https://github.com/example-acarter)

10+ YEARS JAVA

PRINCIPAL ENGINEER

MICROSERVICES

PERFORMANCE & OPTIMIZATION

ORACLE & POSTGRESQL

## PROFESSIONAL SUMMARY

Principal-level Java engineer with 10 years at Northwind Systems, growing from junior to principal while leading the design and implementation of high-throughput microservices. Deep experience across major Java versions (7–21), Spring-based ecosystems, and performance tuning for mission-critical, data-intensive platforms backed by Oracle and PostgreSQL. Strong focus on clean architecture, scalability, and reliability, with proven success mentoring teams and driving technical direction in an internal-facing, product-engineering environment.

End-to-end microservice design & modernization

High-volume OLTP & reporting workloads

GC, profiling, and query optimization

Team leadership & technical mentorship

Limited direct client exposure; strong internal stakeholder focus

## PROFESSIONAL EXPERIENCE

**Principal Java Engineer / Microservices Architect**  
Northwind Systems, Inc.

2022 – Present | Seattle, WA (Onsite/Hybrid)

- Own architecture and implementation of a microservices platform processing 50M+ transactions/day for internal financial operations.
- Lead a team of 6–8 engineers, setting coding standards, reviewing designs, and guiding delivery across multiple services.
- Redesigned legacy Java 8 monolith components into Spring Boot-based microservices, reducing average latency by ~40% and incident rates by ~30%.
- Introduced standardized observability (OpenTelemetry, Prometheus, Grafana) and SLOs, improving mean time to resolution for production issues.
- Partner with product and platform teams (limited direct client contact) to refine technical requirements and align solution design with roadmap.

**Senior Java Engineer / Team Lead**  
Northwind Systems, Inc.

2019 – 2022 | Seattle, WA

- Led development of core Java services handling internal order orchestration and billing across Oracle and PostgreSQL-backed systems.
- Optimized JVM performance using profiling (YourKit, JFR) and GC tuning, cutting CPU usage by 25% on key workloads.
- Refactored high-traffic APIs, reducing 95th percentile response times from 900ms to under 300ms through caching, batching, and SQL optimization.
- Coordinated cross-team design sessions and performed design reviews to ensure consistency in API standards and data models.

- Mentored 4+ junior/mid-level developers, improving onboarding time and code quality across the team.

### **Software Engineer (Java)**

Northwind Systems, Inc.

2017 – 2019 | Seattle, WA

- Developed RESTful Java services for internal order management and reporting using Spring, Hibernate, and Oracle.
- Migrated key services from Java 7/8 to Java 11, resolving compatibility issues and leveraging new language features where appropriate.
- Collaborated with DBAs to redesign slow queries and indexes, achieving 3–5x performance improvements on critical reports.
- Improved test coverage and reliability through JUnit/Mockito tests and integration tests against in-memory databases.

### **Junior Java Developer**

Northwind Systems, Inc.

2015 – 2017 | Seattle, WA

- Implemented backend features and bug fixes in Java for internal line-of-business applications.
- Assisted in decomposing a legacy Java EE application into smaller, REST-based services.
- Wrote and maintained PL/SQL and PostgreSQL functions, views, and scripts for data transformations and batch jobs.
- Worked closely with senior engineers to adopt coding standards, CI/CD practices, and branching strategies.

## **SELECTED PROJECTS**

### **Microservices Modernization of Order Processing Platform**

Principal Engineer & Architect | Java 11–17, Spring Boot, Kafka, Oracle, PostgreSQL, Docker, Kubernetes

Led architectural design and phased migration of a monolithic Java 8 order processing system into a suite of independently deployable microservices. Introduced event-driven communication using Kafka, standardized REST contracts, and implemented blue/green deployments. Achieved ~40% latency reduction and significantly improved release frequency while maintaining backward compatibility for internal consuming systems.

### **Performance Optimization for Financial Reconciliation Engine**

Senior Engineer | Java 8–11, Spring, Oracle, PL/SQL, JFR, YourKit

Profiled and optimized a reconciliation engine handling large nightly batches and on-demand reporting. Eliminated memory hotspots, tuned GC parameters, and refactored N+1 database access patterns into bulk operations. Partnered with DBAs to optimize indexes and partitioning. Reduced batch processing times from 4+ hours to under 90 minutes and improved system stability under peak load.

### **Unified Reporting Microservice for Cross-Database Analytics**

Lead Developer | Java 17, Spring Boot, PostgreSQL, Oracle, Flyway, REST

Designed and implemented a reporting microservice that federated data across Oracle and PostgreSQL sources behind a consistent REST API for internal analytics tools. Introduced a caching layer and query abstraction to support complex filters without exposing underlying schemas. Improved report generation times by 60% and simplified data access for multiple internal teams with minimal direct client involvement.

## **CORE SKILLS**

### **LANGUAGES & PLATFORMS**

[Java 7–21](#)   [JVM internals & GC tuning](#)   [Kotlin \(working\)](#)   [SQL / PL/SQL](#)   [Shell scripting](#)

### **FRAMEWORKS & MICROSERVICES**

[Spring Boot](#)   [Spring Cloud](#)   [Spring Data / JPA / Hibernate](#)   [RESTful APIs](#)   [Event-driven architecture](#)   [Kafka](#)

### **DATABASES**

[Oracle](#)   [PostgreSQL](#)   [Query optimization](#)   [Indexing & partitioning](#)   [Flyway / Liquibase](#)

### **DEVOPS & TOOLING**

Docker    Kubernetes    CI/CD (Jenkins, GitLab CI)    Git    Maven / Gradle

## PERFORMANCE & QUALITY

JFR / YourKit / VisualVM    Load testing (JMeter/Gatling)    JUnit / Mockito    Contract & integration testing  
Observability (OpenTelemetry, Prometheus)

## LEADERSHIP & COLLABORATION

**Team leadership**    Technical mentorship    Architecture reviews    Agile/Scrum    Internal stakeholder collaboration  
Limited client-facing experience

## EDUCATION

### University of Washington

B.S., Computer Science

2011 – 2015 | Seattle, WA

## CERTIFICATIONS & TRAINING

- Oracle Certified Professional, Java SE 11 Developer
- Oracle Database SQL Certified Associate (coursework & exam)
- Spring Professional Certification (Core Spring & Spring Boot)
- Internal architecture and leadership programs at Northwind Systems

## ADDITIONAL INFORMATION

- Primary focus on backend engineering and architecture; minimal direct customer-facing responsibilities.
- Experience working in regulated, audit-conscious environments (logging, tracing, access control).
- Regular contributor to internal engineering guidelines and code-quality practices.