

Eric Mumford

Senior Architect – Software, Quality & Automation

eric@mumfordengineering.com mumfordengineering.com (<https://mumfordengineering.com/>)

Albany, New York

SUMMARY

Senior architect with 30 years building across the full spectrum of software engineering, mostly through the door of quality. I decompose hard systems into organs with clear contracts, make untestable things testable, and ship products end to end. I work in Python, Java, Go, C#, F#, and Cypher — the problem picks the language.

CORE SKILLS

LANGUAGES	Python · Java · Go · C# · F# · Cypher
ARCHITECTURE	Event-Driven · Clean Architecture · Domain-Driven Design · Consumer-Driven Contracts · Fitness Functions
DATA	Neo4j · PostgreSQL · ETL · Process Mining · DORA Metrics
QUALITY	TDD · BDD / Cucumber · Robot Framework · Contract Testing
PLATFORM	FastAPI · Docker · Fly.io · GitLab CI · MCP

EXPERIENCE

Senior QA / Automation Architect

2026 – present

National mortgage lender

- Built end-to-end test automation across the loan origination lifecycle with CI/CD integration.
- Delivered a dependency-free telemetry pipeline unifying scattered run data for BI consumption.
- Stood up process mining and DORA scoring across an estate of 90 repositories.

SELECTED WORK

Cognilateral Python · Neo4j · Event-Driven Architecture · Consumer-Driven Contracts · TDD

HTI5250J Java · TN5250 · IBM i / AS400 · Test Automation · Protocol Engineering

Samstraurm

Java · Clean Architecture · BDD / Cucumber · Event-Driven Architecture · Microservices

QA Metrics Intelligence Platform — an enterprise QA organization

Python · Neo4j · FastAPI · Process Mining · ETL · DORA Metrics

Enterprise QA Automation — a national mortgage lender

Robot Framework · Python · CI/CD · Test Automation · Financial Services

TESSERA Python · Multi-Agent Systems · Event Sourcing · Trust Architecture · TDD

LOM Runtime

Go · State Machines · Protocol Engineering · Mainframe Testing · Legacy Modernization

RedeemFlow Python · FastAPI · PostgreSQL · Multi-Tenancy · SaaS Architecture · JWT

FTOC Java · BDD / Cucumber · Gherkin · TF-IDF · Code Quality Analysis

Developer Tooling & Infrastructure

Python · Model Context Protocol · Agent Communication · Fleet Management · Developer Experience

Checkvox F# · Java · Functional Programming · Cross-Language CI · PostgreSQL

dBridge C# · .NET · ETL · Failure Recovery · OpenAPI · Enterprise Integration

HappyGene

Python · Bioinformatics · Sensitivity Analysis · Hypothesis Testing · Data Science

ThriceGrip Raspberry Pi · Python · Hardware Integration · AI Agent Infrastructure · KVM

References and full project detail available on request.