Tung Nguyen

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SUMMARY

Senior Software Engineer with 4 years building backend Java/Spring Boot microservices, event-driven distributed systems, and AWS infrastructure for a national restaurant chain's POS and menu configuration platform spanning 3,500+ locations. Owns services end to end, from architecture and API design through release management and production incident response. Cut P95 API latency 65%. Built and runs Pullfolio, a live full-stack TypeScript product.

EXPERIENCE

Ernst & Young (EY) | New York, NY **08/2022 – Present**

Technology Consulting | Client: national quick-service restaurant chain

Senior Software Engineer *12/2024 – Present*

- Own menu configuration and POS control services for 3,500+ restaurant locations end to end, from API design through production; as release owner of the core Java/Spring Boot service, shipped 18+ releases and same-day hotfixes
- Re-architected chain-wide configuration operations from synchronous HTTP to SQS batch processing with idempotent retries and DLQ-backed alerting, eliminating timeouts across 3,500+ locations
- Narrowed venue menus from 1,300+ items to ~130 by leading event-driven integration with an upstream menu-eligibility platform: SNS/SQS ingestion, venue-aware APIs, and an idempotent cross-account backfill of 1,000+ locations behind per-store flags
- Reduced P95 API latency 65% across customer-facing POS endpoints by designing Redis caching layers, including a cross-VPC serverless ElastiCache integration with distributed locking, and rewriting hot-path database queries
- Led production incident response across 6 AWS accounts, root-causing lost-update races, payload-size limits, and gateway timeouts from APM traces and database analysis; authored runbooks that cut repeat diagnoses from days to minutes
- Cut deployment time 30% across 12+ microservices by re-engineering CI/CD pipelines; standardized observability (structured JSON logging, Datadog APM) across a Python Lambda fleet and authored the team's logging standard

Software Engineer *08/2022 – 12/2024*

- Created a standalone Java gRPC gateway service, extracted from the core platform, and remained its lead contributor across permissions, discounts, and bulk tax-configuration subsystems
- Architected an event-driven messaging pipeline (AWS Lambda, SNS, SQS) syncing real-time data between cloud services and on-premise POS systems, processing thousands of events per minute at peak
- Built Java/Spring Boot REST APIs and a PostgreSQL data layer for a national restaurant chain's platform unifying menu, inventory, and order processing across 3,500+ locations
- Designed gRPC/Protobuf service integrations for downstream partner systems, reducing payload sizes 40% vs JSON and improving their throughput during peak traffic
- Raised integration test coverage to 80% by creating a JUnit + Testcontainers framework that validates data flows across service boundaries and catches breaking changes before deployment
- Mentored 3 junior engineers on microservices patterns and owned code review standards for the team

PROJECTS

Pullfolio | pullfolio.app | TypeScript, React 19, Node.js, PostgreSQL, Stripe, Docker **08/2025 – Present**

- Designed, built and launched solo a full-stack trading-card collection app with email, Google and Discord sign-in, shareable binder links, price alerts, and Stripe subscriptions with idempotent, signature-verified webhooks; 5,000+ visitors in 3 weeks
- Engineered a daily pipeline merging 5 price sources into one catalog of 77,000+ cards and 144,000+ priced variants across 4 card games; matches records by marketplace ID, then set and number, then confidence-scored name, sending ambiguous matches to a review queue instead of creating duplicates
- Built outlier-resistant headline pricing (source priority, freshness windows, sales over asking prices, spike checks) over ~700K price points
- Runs it in production on Docker Compose with cron jobs, nightly encrypted backups with automated restore checks, Sentry, GitHub Actions CI/CD, and 170+ test files plus 88 end-to-end browser flows

TECHNICAL SKILLS

Languages & Frameworks: Java 21, Python, Go, TypeScript, JavaScript, SQL, Spring Boot 3, Node.js, Express, React, JUnit, Testcontainers, Vitest
Cloud & Infrastructure: AWS (Lambda, SQS, SNS, EventBridge, S3, DynamoDB, ElastiCache, CloudFormation/CDK), EKS/Kubernetes ops, Docker, GitHub Actions, Datadog APM, Sentry, LaunchDarkly
APIs & Integration: gRPC, Protobuf, connect-rpc, REST APIs, OAuth2/JWT (Okta)
Data: PostgreSQL, Flyway, Drizzle ORM, DynamoDB, Redis

EDUCATION

Virginia Tech | Blacksburg, VA **06/2022**

B.S. Computer Science

Certifications: Microsoft Azure Fundamentals (AZ-900)