

JULIUS BTESH

FOUNDING ENGINEER & SYSTEMS ARCHITECT

Brooklyn, New York | (347) 525-4905 | juliusbtesh@gmail.com | linkedin.com/in/juliusbtesh

SUMMARY

Founding Engineer and Systems Architect with 10+ years building production software, including fintech lending platforms and billion-record property-data systems. Owns architecture and delivery across backend services, data infrastructure, and identity.

CORE EXPERTISE

Backend Architecture | Data Platforms & PostgreSQL | Fintech Systems | Identity & Security | Event-Driven Systems

PROFESSIONAL EXPERIENCE

Battalion / Founding Engineer & Architect

Real Estate / Lending Fintech | Brooklyn, NY | July 2019 – Present

- Architected and delivered to production a loan-origination platform built on .NET 8, spanning 300+ endpoints and 71 entities, with multi-tenant isolation, AES-256 field-level encryption, and automated PII-redacting audit logging.
- Engineered a parallelized Python pricing engine integrating 20 investor programs on a shared declarative rules model, retiring hand-written per-investor logic and replacing the firm's commercial pricing platform.
- Built and now operate a nationwide property-data platform managing ~2.6B staged and ~1.5B production records on a replicated PostgreSQL architecture that isolates high-volume ETL from live application traffic.
- Cut long-running parcel autocomplete and comparable-property search times through query optimization, indexing, and workload-specific tuning.
- Rescued the flagship Next.js frontend in 30 days during a team transition, splitting a monolithic application into three independently deployable applications with shared packages. Replaced polling with real-time, non-blocking updates that streamlined page workflows across the app.
- Established the company's shared identity and application platform, combining self-hosted Keycloak, custom Java SPI providers, and reusable auth, UI, and .NET libraries adopted across internal products.
- Developed an internal property-valuation tool with a bulk validation framework for backtesting comparable-pricing models used in acquisitions and lending analysis.

Mango Concept / Lead Software Engineer

New York, NY | Sept 2014 – Mar 2019

Built and maintained consumer mobile and web products across fitness, progress tracking, real-time messaging, payments, and gaming; delivered backend integrations, application infrastructure, and production features using C#, Firebase, Unity3D APIs, and in-app purchase systems.

SmashWorx Entertainment / Game Developer

New York, NY | Jan 2014 – Aug 2014

Shipped a Unity3D/C# mobile game with social features, video sharing, in-game currency mechanics, and supporting backend integrations.

SELECTED PROJECT

Pulse / Market Intelligence Platform

FastAPI, Python, Vector Search, Async Data Pipelines | 2023 – Present

Engineered a personal market research engine using FastAPI and semantic vector search to index and query historical price action, earnings calls, and news across equities, crypto, and metals. Designed asynchronous background pipelines to ingest real-time market data, generating embeddings to support natural-language similarity search and cross-asset comparison.

TECHNICAL SKILLS

Languages: C#, Python, Go, TypeScript, SQL

Frameworks & Architecture: .NET / .NET Core, Distributed Systems, REST APIs, WebSockets, Workflow Engines, API Idempotency

Data & Infra: PostgreSQL (Logical Replication, Vacuum Tuning), MySQL, Redis, RabbitMQ, EF Core, Vector Search

Security & Identity: Keycloak, OIDC, OAuth 2.0, JWT, SSO, RBAC, AES-256 Encryption, PII Redaction

Cloud & DevOps: Azure, Docker, CI/CD, Observability

Testing: Playwright, Testcontainers, k6

Frontend: Next.js, React, Tailwind CSS

EDUCATION

Brooklyn College / B.S. in Computer Science, 2014