

Will Cygan

SENIOR SOFTWARE ENGINEER

✉ wcygan.io@gmail.com 🏠 https://wcygan.net 🐙 wcygan 🌐 Will Cygan

Work Experience

Senior Software Engineer

Chicago, IL

LINKEDIN

March 2024 – Present

- Architected alerting system processing 50,000+ QPS using Kafka/Samza/Venice, enabling real-time payment failure detection that reduced involuntary churn by 15% across LinkedIn's commerce platform.
- Eliminated involuntary customer churn by implementing proactive payment failure alerts, recovering \$2M+ in annual revenue and improving subscription retention metrics.
- Pioneered reusable Oracle-to-MySQL migration framework adopted by 12 teams, saving 1 month of engineering time per team and accelerating organizational MySQL adoption efforts.
- Executed zero-downtime Oracle-to-MySQL migration for 2 services handling 3,000 QPS, maintaining 99.99% data consistency using Couchbase-backed entity routing strategy.
- Migrated 4 critical services from Rest.li to gRPC and standardized service documentation with Docusaurus, accelerating developer onboarding from 2 weeks to 3 days through consistent tooling.
- Reduced downstream traffic by 50% and enhanced reliability by 10% through automated Airflow job that purges 30,000 stale cache records daily.
- Optimized JVM performance across 5 production services from 30-80% to 99.9%+ health, reducing GC spikes by 86% (700ms to 100ms) and eliminating daily alerts.

Software Engineer

San Francisco, CA

LINKEDIN

Feb 2022 – March 2024

- Scaled LinkedIn Learning's VYMBII recommendation service to 3,000 QPS while maintaining 99.9% availability, increasing video discovery CTR by 10% for personalized learning content.
- Designed Spark pipelines processing 20+ datasets and 50+TB weekly to classify 10M+ job seekers, enabling targeted Learning Alerts with 5% higher enrollment rates.
- Launched personalized recommendation engine serving 50M+ daily active users, achieving 10% engagement uplift through TikTok-style carousel UX for video course discovery.

Projects

Anton (Kubernetes Homelab)

🐙 wcygan/anton

- Engineered fault-tolerant 3-node bare-metal Kubernetes cluster using Talos Linux, achieving 99.9% uptime while implementing GitOps CI/CD patterns with Flux.
- Benchmarked distributed data systems (TiDB, RedPanda, DragonflyDB, ScyllaDB) to explore modern alternatives to traditional databases and messaging platforms.
- Fortified cluster with zero-trust architecture using Cloudflare Tunnels and Tailscale.

tokio-utils Rust Library

🐙 wcygan/tokio-utils

- Released async Rust library implementing rate limiting, object pooling, and graceful shutdown patterns, achieving 2x speedup improvement in object pool benchmarks.
- Implemented web crawler processing 300+ pages/minute with adaptive rate limiting, achieving 0% IP blacklist rate across 1,000+ domains while respecting robots.txt.

Skills

Languages Java, Rust, Go, Python, TypeScript, SQL, Scala, Bash

Technologies Kafka, gRPC, Temporal, Flink, Spark, Airflow, Kubernetes, Docker

Databases MySQL, Redis, Couchbase, Oracle, ScyllaDB, DragonflyDB

Education

University of Illinois at Chicago

Chicago, IL

B.S. IN COMPUTER SCIENCE

2021