

```
anton@bayarea:~/resume$ whoami
```

Anton Vakulchyk

Senior Staff Software Engineer · Backend & Distributed Systems

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```
anton@bayarea:~/resume$ cat summary.txt
```

Senior staff-level engineer with ~20 years architecting backend and distributed systems – high-throughput APIs, data pipelines, and cloud infrastructure – across healthcare, e-commerce, consumer mobile, and workplace SaaS. Two-time engineering manager who returned to deep IC work, driving system-level design, correctness under concurrency, and pragmatic delivery across teams. Most recently founded and built an AI platform end to end (Go/AWS, applied ML, native iOS) – pairing architectural breadth with hands-on depth.

```
anton@bayarea:~/resume$ ./experience --all
```



Founder & Engineer · **TeraThreshold**

Feb 2023 – Present

San Francisco, CA

- Building an AI platform that turns raw Garmin data into running-form analysis, injury-risk scoring, and daily readiness – architecting the system, the models, and the iOS product end to end.
- Designed an idempotent ingestion pipeline (Go, Kafka, DynamoDB) for out-of-order, at-least-once webhooks; used atomic set operations and compound conditional writes to eliminate concurrent-writer races and double-counting.
- Engineered a simulation clock injected across all services, separating replayable business time from wall-clock time – cutting multi-day pipeline verification to seconds and failing loudly on misconfiguration.
- Built a multi-pathway injury-risk model (acute:chronic load, monotony, recovery) and effort-zone segmentation via a hidden semi-Markov model with Viterbi decoding; shipped a native SwiftUI app with StoreKit 2 and push-driven sync.



Senior Software Engineer · **Envoy**

Oct 2019 – Jan 2023

San Francisco, CA

- Architected a centralized GraphQL gateway (Kotlin) federating dozens of internal REST APIs – resolving N+1 and over-fetching to give teams a unified, low-latency graph.
- Designed core data-privacy infrastructure (PII lifecycle, enterprise compliance) for Envoy Protect & Visitors; led Ruby on Rails backend for Envoy Desks (concurrent booking/availability).
- Re-architected Workplace Analytics ETL (dbt, DMS, Redshift, Kubernetes) to absorb usage surges and generate reliable daily analytics without impacting transactional databases.



Senior Software Engineer · Razer

Sep 2018 – Oct 2019

San Francisco, CA

- Architected highly available microservices (Node.js, TypeScript, Java) powering the software ecosystem for Razer Phone & Razer Phone 2; designed GraphQL APIs tuned for mobile/cellular.
- Integrated Elasticsearch for high-speed search, content delivery, and telemetry; containerized services with Docker, Helm, and Kubernetes on AWS with auto-scaling for launch spikes.



Senior Software Engineer · HotSchedules

Aug 2017 – Sep 2018

San Francisco, CA

- Architected non-blocking, event-driven JVM microservices (Vert.x) for real-time shift scheduling at high concurrency without thread-blocking bottlenecks.
- Engineered Node.js APIs with polyglot persistence – DynamoDB, MongoDB, Redis; streamlined CI/CD on AWS with Jenkins and Puppet.



Engineering Manager → Senior Software Engineer · BuyerQuest

May 2014 – Aug 2017

Cleveland, OH

- Eng Manager (2016–2017): Led a cross-functional org of engineers, ETL specialists, and QA; standardized agile, modern tooling, and CI/CD, cutting onboarding time and lifting code quality.
- Sr SWE (2014–2016): Architected high-volume B2B/B2C procurement on Magento Enterprise (Solr, cXML); built fault-tolerant ETL (CloverETL, Java); drove monolith→microservices (PHP Lumen, Java Jersey) and early AWS Lambda serverless.



Engineering Manager → Senior Software Engineer · Qure4u

Sep 2010 – May 2014

Bradenton, FL

- Eng Manager (2012–2014): Led a fully distributed engineering/QA team delivering critical healthcare-portal releases under strict compliance.
- Sr SWE (2010–2012): Architected a high-traffic healthcare platform with secure SOAP/REST and HL7/EDI for EHR interoperability; AWS infra (EC2, RDS, VPC, SQS/SNS), RabbitMQ, Redis/Memcached, payment/SMS integrations.



Software Engineer · Soft-Ukraine

Jul 2006 – Sep 2010

Dnipro, Ukraine

- Migrated legacy applications to the Zend Framework; built reusable OO modules across Joomla, Drupal, Moodle, and WordPress.
- Designed and tuned complex MySQL (stored procedures, triggers, indexing); built automated data-integration pipelines (XML/JSON/flat files); load-tested with JMeter.

anton@bayarea:~/resume\$ ls skills/

```
languages/      Go, Kotlin, Java, TypeScript/JavaScript, Ruby, PHP, Swift
backend-apis/   Distributed Systems, Microservices, Event-Driven Architecture, GraphQL,
                REST, Vert.x, Ruby on Rails, Node.js
cloud-infra/    AWS (Lambda, DynamoDB, Redshift, EC2, RDS, SQS/SNS, DMS), Kubernetes,
                Docker, Helm, Terraform
devops-observ/ CI/CD Pipelines (GitHub Actions, Jenkins, Puppet), CloudWatch, Datadog,
                Structured Logging, Metrics & Monitoring
```

data/ DynamoDB, PostgreSQL/MySQL, MongoDB, Redis, Elasticsearch, ETL/dbt, RabbitMQ

ai-ml/ Applied ML, Time-Series Modeling, Hidden Markov Models, LLM/Agentic Application Design

mobile/ SwiftUI, StoreKit 2, APNs, iOS Architecture (MVVM)

```
anton@bayarea:~/resume$ cat education.txt
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```
M.S., Information Technologies & Computer Science // 2005-2008
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National Metallurgical Academy of Ukraine
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B.S., Programming for Computer Engineering & Computerized Systems // 2001-2005
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Paton College of Welding and Electronics
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```
anton@bayarea:~/resume$ exit
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[Process completed]
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