

Nicholas J. Arnold

Software engineer and technical lead

CONTACT

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LINKEDIN

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GITHUB

github.com/nickarnold

LOCATION

Denver, CO, USA

TOP SKILLS

JAVA

SPRING

NODE.JS

GNU/LINUX

RESTFUL APIs

TEAM BUILDING

DISTRIBUTED SYSTEMS

SYSTEMS INTEGRATION

PROCESS AUTOMATION

ABOUT

Highly accomplished software engineer and technical lead with 17+ years of experience in designing, developing, and architecting scalable backend systems for cloud-native environments. Skilled in building end-to-end solutions from scratch or integrating new features into existing systems by leveraging expertise in modern frameworks, techniques and tooling. Takes pride in and advocates for not merely getting a system to work, but building it in an extensible, observable and grokkable way. In short I build solutions to business problems as well as the teams that support and sustain those solutions.

RECENT EXPERIENCE

PRINCIPAL ENGINEER & OWNER — CITY LABS

AUG 2020 - PRESENT
DENVER, CO (REMOTE)

City Labs is a contract software engineering and technical consulting firm that I own and operate.

PRINCIPLE SOFTWARE ENGINEER - APIs & MICROSERVICES (CONTRACT) — ARVEST BANK

SEP 2021 - MAR 2024
BENTONVILLE, AR (REMOTE)

Contracted at the onset of a large multi-year digital transformation to help build the foundation for the next generation of Arvest Bank's digital infrastructure.

KEY ACHIEVEMENTS:

- Built an asynchronous central loan transaction processing system supporting multiple banking core systems enabling a gradual and seamless migration from legacy systems to Thought Machine's Vault
- Designed and implemented a distributed tracing architecture with OpenTelemetry and Jaeger affording app and microservice teams a high degree of visibility into the flow of requests through APIs, Kafka topics and calls to persistent relational storage

TECH STACK:

Java (7 -> 21), Spring Boot, Apache Kafka (later, Confluent Kafka), PostgreSQL, OpenTelemetry (tracing), Google Kubernetes Engine (GKE), Podman, OpenAPI, Terraform

TECHNICAL CONSULTANT (CONTRACT) — GOOD MOVE PT & WELLNESS

MAR 2024 - SEP 2024
DENVER, CO (REMOTE)

Contracted to help a local physical therapy business with their website, digital marketing and backend process automation

TECH STACK:

Node.js, nginx, Cloudflare, Counterscale (web analytics)

PRINCIPAL SOFTWARE ENGINEER — PACIFIC PREMIER BANK - TRUST DIVISION

JUN 2020 - AUG 2021
DENVER, CO (HYBRID)

Acquired as part of Pacific Premier's acquisition of Opus Bank.

KEY ACHIEVEMENTS:

- Lead a successful core platform migration from Innovest's InnoTrust to SEI's Digital Wealth Platform enabling the bank to realize a key strategic goal positioning themselves for future growth
- Created comprehensive documentation of all microservices, events, and their interactions using Markdown and Mermaid.js leading to greatly improved system visibility, easier onboarding and more effective system extension

TECH STACK:

Javascript, Node.js, RabbitMQ, Docker, nginx, OpenAPI

PRINCIPAL SOFTWARE ENGINEER — OPUS BANK (ACQUIRED BY PACIFIC PREMIER BANK)

APR 2016 - JUN 2020
DENVER, CO (HYBRID)

Acquired as part of Opus Bank's purchase of PENSICO Trust Company. Responsible for leading all technical development of the company's internal and public-facing APIs and microservices.

KEY ACHIEVEMENTS:

- Designed, implemented and launched the Custodian Connect™ API allowing partner institutions to whitelabel our services providing the capability to open, fund and invest in alternative (non-publicly traded) assets
- Simplified and secured the network architecture by introducing the Kong API Gateway to handle all incoming and outgoing traffic
- Sole developer of a bulk account import capability used to onboard well in excess of \$1 billion in assets and accounts from large new institutional partners

TECH STACK:

Javascript, Node.js, PostgreSQL, RabbitMQ, Docker, Kong (API Gateway), Ansible, Kubernetes, Helm

SENIOR SOFTWARE ENGINEER — PENSICO TRUST COMPANY (ACQUIRED BY OPUS BANK)

AUG 2015 - APR 2016
DENVER, CO (HYBRID)

Hired to help lead the greenfield development of a suite of cloud-native core services underpinning multiple new internal and public-facing web apps.

KEY ACHIEVEMENTS:

- Built a business-specific wrapper around the core trust accounting system greatly simplifying other internal and public facing service integrations. This service was also heavily leveraged by other future projects in the company.
- Substantially increased developer efficiency by standardizing local development with Docker and Compose

TECH STACK:

Javascript, Node.js, PostgreSQL, Docker

SOFTWARE ENGINEER — LEVELS BEYOND (ACQUIRED BY SIGNIANT)

MAR 2013 - JUL 2015
DENVER, CO (ONSITE)

One of the first engineers hired after company received VC funding in late 2012. Initially was responsible for leading backend development of the bespoke codebase used by the UFC. Moved to the core engineering team as the company transitioned it's technology to a cloud-based service oriented architecture on AWS. Collaborated with exceptionally talented teams of engineers to build the technology that helped lead the company to a successful exit to Signiant.

KEY ACHIEVEMENTS:

- Built the first version of the company's `Live Clipping` feature allowing a key early customer to monetize their content instantly versus waiting for up to 3 days for the digital masters to be shipped and imported
- Increased new developer efficiency by ~25% via containerization and automation of our local development environments

TECH STACK:

Java, Spring, ActiveMQ, Elasticsearch (now Elastic), Node.js, Javascript, AWS (Cloudfront, EC2, Route53, S3), Github (git), Vagrant (containerization)

EDUCATION

BACHELOR'S DEGREE IN COMPUTER SCIENCE — UNIVERSITY OF IOWA

IOWA CITY, IA