

CHRISTIAN BLANK

Two-Time Founder-CTO · Hands-On Director-Level Platform Engineering Leader

AI-Native Execution Systems · Platform Turnarounds · Developer Platforms · Mission Acceleration & System of Work

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PROFILE

Two-time founding CTO and senior engineering leader who combines founder velocity, large-system rigor, and platform judgment to build the operating substrate that makes missions execute faster, cleaner, and with more coherence. Engineering is my primary medium, not my boundary: I use product, platform, infrastructure, process, and culture to turn individual talent into shared execution systems that carry research to production. Proven across zero-to-one platforms, turnaround execution, and cross-org infrastructure unification at Apple SPG, Eigenly, Flux.ai, Forward Health, and Cruise. Built teams 0→14, company 0→25+, raised ~\$25M, delivered 5x platform velocity, 80% incident reduction, 12–14 releases/day at 99.9% uptime, and 70% runtime reduction.

OPERATING SCOPE

- **Zero-to-one company and platform building:** Co-founded Eigenly and Flux.ai; built founding products, platforms, infrastructure, recruiting systems, execution cadences, and technical cultures from first principles.
- **AI-native execution systems:** Building Fireweed as a governed substrate for human/AI work across intent, workflows, rooms, agents, contracts, provenance, verification, infrastructure, CI, release, and product surfaces.
- **Product-minded substrate ownership:** Treat internal developer platforms, customer-facing products, infrastructure, quality systems, observability, CI/CD, workflow systems, collaboration runtimes, partner integrations, and operating mechanisms as one coherent product substrate.
- **Existing-org transformation:** Enter complex or degraded organizations, diagnose the real execution system, rebuild technical foundations, raise engineering standards, reset ownership culture, and turn reliability, cost, delivery, and cadence into durable organizational capability.
- **Cross-org navigation and unification:** Operate inside matrixed, high-rigor environments by earning trust across ICs, EMs, directors, product, operations, finance, researchers, and infrastructure teams; unify fragmented systems through coalition, architecture, standards, and adoption rather than title alone.

SELECTED PROOF POINTS

- **Founder/CTO scope:** Co-founded Flux.ai and Eigenly; at Flux built engineering 0→14 and company 0→25+, raised ~\$25M, and created product/platform architecture, recruiting systems, developer culture, and company operating systems from zero.
- **AI-native construction proof:** In ~six months / 110 active mainline days, two engineers used standard Codex, Claude Code, Gemini CLI, and Replit workflows against Fireweed's System of Work substrate to run product, platform, infrastructure, governance, CI/release, and evidence tracks in parallel. Evidence: 1,411 merged PRs, 16.2K reachable commits, 25 commits in a peak minute, 14 concurrent Codex sessions, 16 backend services, 5 apps, 87 Postgres migrations, 371 Bazel test targets, and live production endpoints.
- **Execution substrate:** Created a repository-governed operating layer spanning a 279K-line Rust control plane and a 1.83M-line governed work/evidence corpus with workflows, ADRs, domain agents, verification reports, product-intent records, and audit trails.
- **Turnaround execution:** Rebuilt Forward Health's platform, infrastructure, observability, cost discipline, and ownership model during a strategic pivot: 3x delivery, 5x shipment velocity, 80% fewer incidents, 60% lower MTTR, 35% lower cloud cost, and onboarding reduced from ~5 months to 4 weeks.
- **Cross-org technical leadership:** Unified vehicle-dynamics simulation across three Apple SPG organizations without formal authority; built the coalition, designed the C++ platform architecture, led a five-person cross-functional implementation team, and earned best technical proposal recognition from three directors.

EXPERIENCE

Eigenly AI · Co-Founder & CTO

San Francisco, CA · Jul 2025 – Present

Building Fireweed: an AI-native coordination platform, product substrate, and System of Work for governed human/AI execution. Own company technical strategy, platform architecture, product infrastructure, cloud foundation, operating model, AI-agent execution loops, and the thesis-to-product bridge.

- **Built Fireweed from zero:** work kernel, surface director, workflow engine, room runtime, agent runtime, Codex bridge, context/memory planes, provenance/evidence loops, CI/release/repair automation, and product surfaces.
- **Delivered production-grade platform scope with two engineers:** 16 backend services, 5 apps, 18 packages, 30 canonical protobuf files across 26 domains, 87 RLS-backed Postgres migrations, 371 Bazel test targets, 19 Helm charts, 26 GitHub Actions workflows, Pulumi-managed GCP infrastructure, and GKE/Firebase deployments.
- **Proved a high-concurrency AI-native engineering operating model:** 110 active mainline days; 1,411 merged PRs, 16.2K reachable commits, 25 commits in a peak minute, 14 concurrent Codex sessions, and live production endpoints.
- **Moved humans up the execution chain:** humans held system-level planning, architecture, verification, and handoff while bounded agents executed implementation inside provenance, governance, review, and release constraints.
- **Built Wishflower on the same substrate:** multiplayer AI shopping, room-native collaboration, commerce/product intent, shared platform primitives, and reuse across internal and external execution surfaces.

Independent · Contract Engineering & NexOS Platform Development

San Francisco, CA · Jan 2025 – Jun 2025

Built NexOS, the solo precursor to Fireweed, after a contracting scope sized for 1 PM + 3 SWEs was delivered solo. Proved the System of Work thesis through production client delivery, autonomous workflow orchestration, evidence/replay, and human-in-the-loop authority boundaries.

- **Built NexOS as a production agentic platform:** BPM-style orchestration, human-in-the-loop escalation, capability tokens, state machines, hermetic CLI execution, MCP-ready interfaces, and OTel-backed evidence ledger/replay.
- Achieved 42-minute autonomous workflows when common industry tools were still operating in short copilot-style loops.
- Solo-delivered a \$100K client milestone two weeks early, validating both the platform and the operating model that became Fireweed.

Forward Health · Senior Engineering Manager, Platform & Infrastructure

San Francisco, CA · Nov 2023 – Nov 2024

Recruited into a velocity, reliability, cost, and ownership crisis during Forward's pivot toward self-serve CarePods and AI-enabled healthcare operations. Rebuilt the platform, infrastructure, observability, cost discipline, and engineering operating model as one system.

- **Turned a reactive infrastructure group into one of the company's highest-leverage teams:** roadmaps, SLO/SLI discipline, runbooks, DRI on-call, and root-cause operating cadence. 3x delivery improvement, 80% incident reduction, onboarding from ~5 months to 4 weeks.
- **Led the developer-platform rebuild:** shared SDK, reusable component system, Figma/Storybook integration, browser-based app previews, GraphQL mocking, build tracing, and self-serve tooling. 5x shipment velocity, lead time from ~1 hour to ~5 minutes.
- **Rebuilt observability:** OpenTelemetry, Honeycomb, CloudWatch, dynamic sampling, distributed traces, SLOs/SLIs, and dashboard-as-code. 80% fewer incidents, 60% lower MTTR, 30% lower observability cost.
- **Led company-wide cost reduction:** 35% cloud infrastructure savings and 25% SaaS savings in three months, with continuous visibility mechanisms for ongoing gains.
- **Rebuilt the post-layoff operating model:** engineering handbook, staff talks, debt logs, weekly VP-level reporting, CEO/Head-of-Engineering roadmaps, interview calibration, and coaching for first-time managers.

Independent · Advisor, Technical Due Diligence & Leadership Coach

San Francisco, CA · Nov 2022 – Oct 2023

- **Advised venture firms on 20+ technical assessments:** engineering teams, architecture, scalability, product feasibility, technical debt, and organizational maturity.
- **Coached founders, CTOs, and senior engineers:** technical leadership, org design, infrastructure strategy, and execution systems; built Company OS prototypes that became a direct precursor to Fireweed.

Flux.ai · Co-Founder & CTO

San Francisco, CA · Oct 2019 – Oct 2022

Co-founded Flux.ai to bring browser-native collaboration, simulation, cloud workflows, and AI-assisted design into hardware development. Built the founding platform, engineering organization, product architecture, developer culture, recruiting function, and company operating system from zero.

- **Built the founding product/platform for a \$200B market:** browser-based circuit/PCB design, distributed state sync, real-time collaboration, granular change history, project forking, cloud data migration, TypeScript SPICE simulation, 3D PCB/WebGL, and searchable parts library.
- **Scaled engineering 0→14 and company 0→25+;** raised \$1.7M pre-seed on prototype/pitch and ~\$25M total; stayed materially implementation-active while leading architecture, recruiting, product, infrastructure, and engineering culture.
- **Delivered production collaboration at real scale:** 100 concurrent users/project, p95 <2s, 60fps, 99.9% uptime, and 12–14 releases/day without dedicated QA or DevOps.
- **Created a high-velocity engineering system:** push-on-green CI/CD, stacked PRs, distributed tracing, session replay, performance/E2E testing, and error tracking.

Cruise · Senior Software Engineer, Autonomous Platforms

San Francisco, CA · Jun 2019 – Oct 2019

- **Re-architected the core simulation-replay graph synchronizer:** Python→C++ port with Cython API, preserving Python workflow compatibility while enabling deterministic ROS-compatible replay for large autonomous-driving scenarios.
- Enabled terabyte-scale replay workloads: 70% runtime reduction, 80% faster large-dataset load times, 20% CI flakiness reduction.
- Partnered with the Head of Safety to improve scorecard/backward-compatibility infrastructure and root-cause analysis tooling.

Apple SPG · Senior Software Engineer & Cross-Org Platform Lead

Cupertino, CA · Jan 2015 – May 2019

- **Unified vehicle-dynamics simulation across three Apple SPG organizations without formal authority:** built the coalition, designed the C++ platform architecture, and led a five-person cross-functional team across C++/ROS, Matlab, Simulink, Simscape, CarSim, Unreal, and Python workflows. Best technical proposal recognized by three directors; earned 9/9 review and rapid ICT3→ICT4 promotion.
- **Built core simulation engineering infrastructure from scratch:** make/CMake, Bash tooling, code coverage, Jenkins patch-set checks, Gerrit/Bitbucket integrations, and TDD adoption practices.
- **Built 0→1 petabyte-scale ML data infrastructure:** C/C++/Python retrieval clients, AWS S3/Glue/Parquet/Presto migration, schema infrastructure, REST APIs, Python CLI, React/Flask UI, Splunk/Tableau dashboards, and data-quality reporting; enabled researchers, ML engineers, and annotators to self-serve.

Metaio · Business & Platform Development, Aerospace AR · Munich, Germany · 2014

- **Developed enterprise AR partnerships with Airbus, Lufthansa, and Cisco:** aerospace MRO, drone inspection, and tele-maintenance workflows. Scoped a \$50K drone-inspection pilot and designed a \$1M tele-maintenance program architecture.

EDUCATION

B.Sc. Aerospace Engineering & B.Sc. Automotive Engineering (Dual) – Dipl.-Ing. (FH), Munich, Germany

Head of Aerospace Laboratory, DHBW: Led ~40 students and managed ~€100K budget across applied aerospace projects; converted a decommissioned military helicopter into a force-feedback hardware-in-the-loop flight simulator, founded the university's first UAV research lab, and established private-sector research partnerships.

TECHNICAL SCOPE

AI-native execution systems: Codex · Claude Code · Gemini CLI · Replit · agentic workflows · human/AI coordination · provenance · verification loops · capability tokens · MCP-ready interfaces · System of Work

Platform/product infrastructure: gRPC · Protobuf · FastAPI · Node.js · REST · event/workflow systems · API/SDK design · collaboration runtimes · multi-tenant control planes · product surfaces

Frontend/product: React · Next.js · Expo · React Native · TSX · WebGL · Storybook · Figma systems · browser-based testing

Cloud/infrastructure: GCP · AWS · Firebase · GKE · EKS · Cloud SQL · RDS · Redis · BigQuery · S3 · Glue · Lambda · ECS · Docker · Helm · Pulumi

Developer systems: Bazel · Bazelisk · pnpm · GitHub Actions · CI/CD · stacked PRs · build tracing · test determinism · release automation

Observability/reliability: OpenTelemetry · Honeycomb · Datadog · Sentry · CloudWatch · distributed tracing · SLOs/SLIs · dynamic sampling

Languages: Rust · TypeScript · TSX/React · Python · C++ · Go · SQL · GraphQL

Autonomous/simulation systems: ROS · simulation replay · deterministic graph synchronization · Unreal · Matlab/Simulink · Simscape · CarSim