



Nick Florin

Senior Software Engineer

@nickmflorin

ABOUT

A detail-obsessed, ownership-driven, product-first engineer who goes well beyond closing tickets. Deeply invested in the *why* behind every feature, proactively identifying architectural gaps, raising engineering standards, and driving meaningful improvements across the product and the team, end-to-end, pushing the user experience forward at every turn.

Proactive by default: He proposes the fix before being asked, carries features from ambiguous scope to production polish.

Has a proven track record of leading cross-functional pods, delivering high-impact features, and elevating the engineering bar at every stage of a company's growth.

- + 11 years of software engineering
- + M.S. in Financial Mathematics, JHU
- + B.S. in Electrical Engineering, RPI

CONTACT

- @ nickmflorin@gmail.com
- in/nick-florin-5046063b/
- github.com/nickmflorin
- www.nickflorin.com

LANGUAGES & FRAMEWORKS

Python		Expert
TypeScript		Expert
JavaScript		Expert
React		Expert
Next.js		Expert
Django / DRF		Expert
Flask		Expert
Node.js		Advanced
Express.js		Proficient
GraphQL		Advanced
Redux		Advanced
TailwindCSS		Advanced
Prisma		Advanced
Sass		Advanced
Swift		Proficient
Go		Familiar
C++		Familiar

TOP SKILLS

- PythonTypeScriptReactDjango / DRF
- Next.jsGraphQLFlaskNode.jsAWS
- PostgreSQLREST API DesignSSR
- MicrofrontendsTesting (RTL, Jest, Playwright)
- NxAccessibility (axe-core)

KEY STRENGTHS

- Full-Stack OwnershipSystems Architecture
- Performance EngineeringDeveloper Experience
- Design / UX PartnershipEngineering Leadership
- Cross-Functional Delivery



Senior Software Engineer

Craft Education System

Oct 2024 - Present Remote

Engineering Lead of a cross-functional product pod, responsible for leading the development of large, customer-facing features. Played a central role in the company's architectural evolution following its acquisition by WGU (Western Governors University), driving the transition from a single-product engineering organization - operating out of one product codebase - to an enterprise-grade, multi-product platform organized as a unified monorepo. Championed the underlying monorepo strategy and Nx adoption as the structural foundation for that transition, establishing shared tooling, independent product surfaces, and scalable team ownership within one cohesive engineering platform.

Most recently, drove the platform's most consequential frontend effort since the monorepo: a coordinated Auth0 v4, Next.js 16, and React 19 replatform paired with a months-long performance program that unwound a client-bound rendering architecture and restored server-side rendering, page caching, and healthy Core Web Vitals across the product.

Operated consistently above title - writing code, authoring architectural specs, producing technical analyses, and unblocking teammates across the engineering organization.

The pod's output was directly instrumental in attracting and onboarding new enterprise accounts and qualifying the company for several public-sector grants.

Leadership

Led a cross-functional pod from the ground up, starting as a 2-engineer team alongside a PM and rotating designer, then expanding into a 5-engineer pod with a dedicated PM. Served as Engineering Lead throughout, owning feature scoping, technical planning, sprint execution, and delivery end-to-end.

- Segmented Learner Cohorts** - Tenant-aware membership and access-control system gating content, assessments, and activity visibility across nested customer cohorts. Drove the architectural call: landed on policy-based authorization with hierarchical permission scoping and modeled cohort membership as a composable relationship graph - enabling nested inheritance and cross-organizational sharing.
- Rubrics** - Grading surface for instructors, evaluators, and admins to design, attach, and score configurable rubrics; now the most-used feature in the product. Led the redesign after the original implementation accumulated unfixable state-management bugs - aligning product, design, and engineering on a four-mode provider pattern (view/edit/attach/score) and a schema-driven form architecture unifying every surface behind one rendering pipeline.

Architecture

- Auth0 v4 & Next.js 16 Replatform** - Owned the platform upgrade that had stalled repeatedly: a legacy, client-bound Auth0 integration pinned the app to React 18 and blocked the Next.js upgrade path entirely. Re-architected authentication around edge middleware and server-side session management on Auth0 v4, then landed Auth0 v4, Next.js 16, React 19, and Turbopack as a coordinated three-stage rollout - a net deletion of code - with zero customer-facing downtime.
- Server-Oriented Frontend Migration** - Led a sustained, incremental migration - building team buy-in and driving a rethinking of the app's client/server boundaries over many months - to dismantle the client-side waterfall behind every cold page load: a ~1 MB bundle download followed by serial session, user, environment, and feature-flag requests that produced 3-4 seconds of blank screen before first paint and defeated Next.js page caching entirely. Progressively moved session validation into edge middleware, feature-flag evaluation to server startup, and provider bootstrapping onto the server - so pages fully pre-render, previously-visited pages return near-instantly from the restored page cache, and the app's third-party browser exposure collapses to a single first-party origin, eliminating a class of customer-firewall outages.
- Bundle Size & First Load Performance** - Diagnosed the root causes behind a bloated shared bundle - barrel-export fan-out, a 525 kB generated GraphQL document, a non-lazy provider cascade, and a UI package exports map silently pointing to CJS output that defeated tree-shaking - then authored the remediation roadmap and led its incremental delivery across the team over successive releases, cutting the app-wide first-load JavaScript baseline 62% (1.01 MB to 383 kB) and the shared app chunk 68% (921 kB to under 300 kB).
- Core Web Vitals & Loading Performance** - Combined, the architectural unlock and bundle work improved FCP/LCP ~50% and TTI ~60% on high-traffic pages and cut cold-load times by 2-4 seconds on slower and corporate-throttled networks; non-critical client work (session replay, analytics boot, background refreshes) now defers until the browser is idle, keeping the main thread free for first paint.
- Embedded Analytics Proxy & Report Performance** - Co-architected the company's embedded-analytics integration (ThoughtSpot) around a deliberate licensing constraint: rather than provisioning per-user service accounts, all reporting is served through one service account with requests proxied through the app - saving the company roughly \$50k per year. Uncovered the critical report-loading bottlenecks that were overwhelming the client and freezing browsers, then designed and implemented the remedy - per-user liveboard preloading under the shared account plus streamed, cached proxy assets - making report loads near-instantaneous.
- Monorepo & Microfrontend Decoupling** - Championed and led a long-term restructuring of the platform around scalable monorepo patterns: spearheaded Nx adoption, reoriented engineering efforts toward decoupled, independently-owned modules with clean microfrontend boundaries, and steered the company's expansion from a single-product codebase toward a scalable, multi-product mesh.

Mentoring

Invested heavily in the growth of junior and mid-level engineers through structured PR reviews, pair programming, and 1:1 mentoring focused on TypeScript, React, Next.js, and GraphQL. Acted as a consistent technical resource and escalation point for the broader engineering organization.

Design & UX Coordination

Primary liaison between Design/UX and Engineering; established structured handoff and feedback processes that reduced ambiguity, shortened iteration cycles, and produced measurably better user experiences. Spearheaded integration of Deque axe-core accessibility checks into CI/CD pipelines for automated WCAG enforcement.

- TypeScriptReactNext.jsGraphQLApollo ServerPrismaPostgreSQLMonorepo (Nx)Microfrontends
- SSR / RSCPerformance EngineeringAccessibility (axe-core)DatadogPlaywrightGitHub ActionsAWS



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AI TOOLING & AUTOMATION

Claude CodeClaude DesignCursor

GitHub CopilotAgentic Workflows

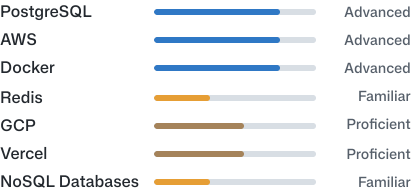
MCP IntegrationsAI Code Review Automation

Context EngineeringCustom Agents & Skills

Agent Guardrails (ESLint, CI)

Spec-Driven DevelopmentPrompt Engineering

CLOUD & DATABASES



ARCHITECTURAL PATTERNS

Service-Oriented ArchMicroservices

MicrofrontendsMesh-Style ArchitectureNx

Server-Oriented FrontendSSR

GraphQL Schema DesignREST API Design

Component ArchitectureDesign Systems

CI/CDEvent-Driven Architecture

Bundle AnalysisPerformance Engineering

Structured LoggingAccessibility (WCAG)

Observability

UI & COMPONENT LIBRARIES

MUI (Material UI)Mantineshadcn/ui

Styled ComponentsEmotionRadix UI

TESTING

JestvitestReact Testing Library

PlaywrightCypresspytestStorybook

Visual Regressiontoxcodecov

Unit / Integration / E2E

MONOREPO & BUILD

NxTurborepoLernapnpm

yarn workspacesBundle Analysis

Tree-shakingRemote Build Caching

Affected-task Pipelines

CI/CD & AUTOMATION

GitHub ActionsCircleCIJenkinsDocker

Reusable WorkflowsPoetrypnpm



Senior Software Engineer

Northbeam

Jul 2023 - Jun 2024 Remote

Contributed to the ongoing development of Northbeam's flagship marketing analytics platform across web and mobile surfaces.

Multi-Currency Analytics

Designed and implemented a currency localization system enabling all marketing analytics to be denominated in a user-configurable currency, directly expanding the platform's addressable market to international customers.

Component Library

Architected a well-tested, flexible internal component library built on React, SASS, and TailwindCSS. Enabled significantly faster feature development, reduced UI inconsistency across the product, and made design-scope changes far easier to absorb throughout the codebase.

ReactTypeScriptGraphQLTailwindCSSSassReact NativeGCPStorybookComponent Architecture

Responsive DesignLerna



Founding Engineer

ShelfCycle

Apr 2023 - Aug 2023 Washington, DC

Contributed to early MVP development of a web-based inventory management, order management, and accounting platform for the chemical supply chain industry. Organized Agile workflows, led team meetings, and mentored engineers less familiar with the stack built on Next.js, TRPC, Prisma, and Vercel.

Next.jsTRPCReactPrismaVercelTypeScriptSSR / RSC



Software Engineer

Corsha

Jun 2022 - Mar 2023 Vienna, VA

Team lead for the "Corsha Console," a modern customer-facing web platform enabling customers to manage, monitor, and configure proprietary network security technology. Owned the product roadmap from initial planning through delivery: scoped the system architecture, established Agile workflows, coordinated with an external UI/UX design firm on the full UX and user flow, and led the engineering team through implementation. Maintained high code quality through rigorous PR review and active mentoring of less experienced engineers.

Next.jsTypeScriptReactSassPrismaPostgreSQLNode.jsDockerJenkinsSonarQubeJest

StorybookAccessibilityCI/CD Pipeline Design



Co-Founder & Creator

GreenBudget

Feb 2021 - May 2022 Remote

Architected and led development of GreenBudget, a real-time, multi-user collaborative budgeting and payroll platform for the film production industry, addressing a gap where producers relied on cumbersome spreadsheets and outdated tools. Launched February 2022; by May 2022, the platform had grown to over 1,000 users with approximately 40-50% on paid subscriptions and had been adopted by several film studios for beta testing (now operating as Saturation at saturation.io).

Testing & CI/CD

Spearheaded a comprehensive automated testing suite and CI/CD integration that increased test coverage by approximately 70%, meaningfully improving platform stability and release confidence.

PythonDjango REST FrameworkReactRedux-SagasTypeScriptPostgreSQLRedisCeleryAWS S3

AWS EC2CircleCIDockerpytestWebSocketsDjango Channels



Technical Lead

Nirveda Cognition

Sep 2020 - Mar 2021 Remote

Responsible for the full consumer-facing product: infrastructure architecture, feature development, and technical leadership of a small engineering team. Managed task allocation, conducted all code reviews, and led feature initiatives from planning through delivery. Spearheaded an automated testing and CI/CD initiative that increased test coverage by approximately 70%.

PythonDjango REST FrameworkReactRedux-SagasTypeScriptAuth0PostgreSQLCeleryAWS

DockerJenkins



Full Stack Software Developer

Saracen Energy

Apr 2020 - Sep 2020 Arlington, VA

Developed front-end and back-end analytical tooling used by the trading desk to inform investment decisions, bridging the gap between quantitative analysis and software development teams.

PythonFlaskReactReact-ReduxTypeScriptRedux-SagasDockerJenkinspytestPostgreSQL

RabbitMQElasticSearchSQLAlchemy



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CODE QUALITY & DX

ESLintPrettierStylelintTypeScript Strict

Zodmypypylintflake8black

Huskylint-stagedCommitlint

DependabotRenovate



Platform Developer

The Atlantic

Apr 2018 - Apr 2020 Washington, DC

Backend Python developer supporting The Atlantic's CMS, subscriptions, and digital products. Designed and implemented the Apple News syndication pipeline, opening a new digital distribution channel and directly contributing an additional revenue stream for the company.

PythonDjangoDjango REST FrameworkFlaskNode.jsREST API DesignPostgreSQLAWS Lambda

AWS S3AWS Elastic BeanstalkCeleryDockerJenkinspytest

RockCreek

Quantitative Analyst, Investment Analytics & Data

The Rock Creek Group

Jul 2016 - Apr 2018 Washington, DC

Built internal analytical tooling and data infrastructure supporting investment decision-making at a multi-billion dollar asset management firm. Regularly bridged quantitative analysis and software development teams, formalizing and automating previously manual analytical workflows through Python-based tooling. This role marks the foundation of my professional software engineering practice.

PythonDjango REST FrameworkDjangoReactReact-ReduxNode.jsSassMySQLMongoDBd3.js

AWS LambdaAWS S3pandas

Analytics

Quantitative Research Analyst

PI Analytics

Apr 2015 - Jul 2016 Olney, MD

Researched and implemented complex models for credit default risk across exotic derivatives and structured products, using Python for numerical computation and Monte Carlo simulation.

PythonJavaScriptFlaskDjangoCredit Default Risk ModelingNumerical ComputationMonte Carlo Methods



M.S. in Computational Mathematics

The Johns Hopkins University

Jan 2016 - Postponed Baltimore, MD GPA 3.70 / 4.00

Ongoing coursework toward an additional degree, temporarily postponed.



M.S. in Engineering; Financial Mathematics

The Johns Hopkins University

Aug 2014 - Jan 2016 Baltimore, MD GPA 3.85 / 4.00

Advanced coursework in Applied Mathematics, Statistics & Numerical Computation.



B.S. in Electrical Engineering

Rensselaer Polytechnic Institute

Aug 2010 - May 2014 Troy, NY GPA 3.50 / 4.00

Minor in Economics; Concentration in Robotics & Control Systems.