

Dylan DeFlorio

contact@dylandeflorio.com · [linkedin.com/in/dylandeflorio](https://www.linkedin.com/in/dylandeflorio) · Boston, MA

Summary

Lead Software Engineer at Inspire Brands. I design and operate enterprise automation platforms, and lead the cross-team programs that ship them. Currently extending the same pattern across additional operational domains.

Professional Experience

Inspire Brands · Canton, MA

Jan 2022 – Present

Lead Software Engineer

Aug 2025 – Present

Conceived, designed, built, and operated an end-to-end automation platform. Responsible for architecture, engineering, cross-team coordination, stakeholder demos, QA, and production support.

- Identified a gap in the enterprise loyalty workflow while engineering the original vendor integration and authoring the operational SOP that defined a 30-day offer lifecycle across a ~10-person team. Conceived, proposed, and solo-built the platform that automates it end-to-end, reducing cycle time to same-day turnaround and displacing over \$1M in annual cost across headcount, manual workflows, and internal tooling
- Architected a full-stack platform consolidating 13 enterprise systems into a single interface for offer creation, validation, smoke testing, and deployment. Supports 17 offer types across 85 configurable fields with dual-database persistence and real-time event streaming
- Built a 3-layer intent classification architecture: pre-LLM regex resolution, thin GPT-4.1 classifier, and Pydantic schema validation. This eliminates LLM calls entirely for 40–60% of requests and reduces per-request token consumption from ~18,000 to ~1,000 for the remainder
- Eliminated the multi-team handoff chain (offer ops, QA, vendor coordination, project management) by automating each stage into the platform. Offer parsing, CSV generation, environment testing, and compliance auditing now execute in a single workflow where one operator completes what previously required ~10 people and a 30-day cycle
- Developed a React 19 / TypeScript frontend with 8 Zustand state stores, bidirectional 85-field mapping, and a real-time WebSocket event bus enabling live progress tracking across offer creation, editing, assignment, and testing
- Built a Playwright-based automated smoke tester with anti-bot resilience (randomized interaction timing, cookie consent handling, session recovery), circuit breaker patterns, per-offer distributed tracing, and structured failure categorization across 59 cataloged failure modes
- Implemented Okta JWT authentication, RBAC, Redis rate limiting, a 10-function input sanitization layer, CSP headers, SOX-compliant audit trails, and API-boundary sanitization architecture, all validated by 145 dedicated security tests
- Wrote 2,000+ automated tests enforcing zero passthrough or tautological assertions, full branch coverage per feature, and bug-first test reproduction. Every test exercises real code paths and verifies actual behavior

Senior Software Engineer, Enterprise Applications

Aug 2022 – Aug 2025

- Technical program lead for a multi-brand loyalty ecosystem spanning 3 national brands and 50MM+ members, processing millions of transactions daily.
- Designed, owned, and approved integration architecture across 20+ internal and partner APIs, including POS, OMS, CRM, and third-party loyalty vendors.
- Led full Offer Management System cutovers for Arby's and Sonic, enabling new loyalty features, improving rewards processing speed, and reducing ongoing vendor costs.
- Coordinated large-scale programs involving 15–20 engineers (scaling to 40+ during peak phases) across engineering, product, QA, operations, vendors, and executive stakeholders over 6–12 month timelines.
- Identified automation opportunities in the offer lifecycle that led to the DFLO platform initiative, transforming a manual multi-team process into an engineering problem.

- Defined and approved enterprise API standards including authentication, headers, payload contracts, and error semantics to meet compliance, SOX, and operational requirements.
- Owned technical vendor relationships and led recurring architecture reviews, escalation calls, and integration planning with POS, CRM, and OMS partners.
- Led production incident response for revenue-impacting issues, implementing architectural fixes that prevented recurrence and reduced on-call and operational burden.
- Created SOPs, transition plans, and documentation to move systems cleanly from hypercare to steady state while remaining the escalation point for complex issues.
- Mentored engineers on system design, debugging distributed integrations, vendor management, and operational best practices.

Software Engineer, Enterprise Applications

Jan 2022 – Aug 2022

- Executed the manual offer lifecycle as part of a ~10-person team coordinating offers across 3 national brands and multiple vendor integrations.
- Authored operational SOPs and API integration documentation used by engineering and operations to standardize the loyalty offer workflow.
- Worked across POS, OMS, and CRM vendor integrations, gaining the system-level understanding of the offer lifecycle that later drove the DFLO platform design.

Trivedi Advanced Technologies · Southborough, MA

May 2020 – Oct 2021

Technical Project Manager (Contract)

May 2020 – Oct 2021

- Managed 50+ concurrent B2B software projects for Fortune 500 clients, including legacy system upgrades and complex production troubleshooting.
- Served as the technical bridge between clients and engineering teams, gathering requirements, coordinating delivery, and resolving integration blockers.
- Introduced structured escalation and resolution workflows that improved delivery reliability for high-priority and time-sensitive client engagements.
- Developed MVP mobile application features to validate a startup business model and accelerate early customer adoption.
- Built an internal PCI-compliant payment processor using Stripe APIs, eliminating reliance on costly third-party payment solutions.
- Deployed and maintained AWS EC2 infrastructure for development and production environments.

Convention Data Services · Bourne, MA

May 2019 – Apr 2020

Quality Assurance Engineer

May 2019 – Apr 2020

- Built and maintained automated QA test suites that reduced manual testing effort by ~75% and saved multiple hours per day.
- Translated client and product requirements into actionable test cases for engineering teams.
- Improved reliability and performance of regression testing across releases.

Education

Master of Business Administration in Business Analytics

[University of Massachusetts Dartmouth](#)

Master of Science in Computer Science

[University of Massachusetts Dartmouth](#)

Bachelor of Science in Computer Science

[University of Massachusetts Dartmouth](#)

Skills

ARCHITECTURE & ENTERPRISE SYSTEMS

Enterprise System Architecture Enterprise Integrations at Scale

AUTOMATION & PLATFORMS

Enterprise Automation Platforms Operational Workflow Automation

LOYALTY PLATFORM GROWTH

Loyalty Platform Enablement Offer & Rewards Infrastructure

TECHNICAL LEADERSHIP

Cross-Team Technical Leadership Platform Ownership

INFRASTRUCTURE & DATA

AWS Azure Docker Kubernetes PostgreSQL Redis Git

AI/ML

LLMs AI Agents RAG Prompt Engineering Data Analytics