

# Neal Miller

ENGINEERING LEADER · DISTRIBUTED SYSTEMS · PRODUCT DELIVERY · ARCHITECTURAL TRANSFORMATION & MODERNIZATION

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## Summary

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Engineering leader with over a decade of experience delivering scalable, user-focused software solutions. Proven track record of leading multi-team engineering organizations, elevating engineering execution, and building high-performing teams that deliver measurable business impact. Blends deep technical expertise with strategic leadership, cross-functional alignment, and a strong focus on user-centered outcomes. Experienced in shaping technical strategy, guiding modernization efforts, and aligning multi-team engineering execution with long-term product and business goals.

## Core Competencies

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**Leadership & Strategy** Organizational leadership, Multi-team management, Technical strategy, Product alignment, Hiring & talent development, Vendor/contract management, Agile & PI planning, SDLC optimization, Org design, Portfolio-level prioritization, Change management

**Technical Expertise** Service-oriented architecture (SOA), Event-driven systems, Distributed systems, Scalable web applications, System design, Data-intensive applications, Cloud-native modernization, Architectural governance

**Tools & Technologies** .NET (C#), React, AWS, Apache Flink, Python, Angular, Vue.js

## Experience

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### Senior Software Engineering Manager

Remote

IMAGINE LEARNING

June 2025 - Present

Promoted to oversee all engineering for Imagine Learning's **Literacy Suite**, including both student and educator experiences, which serves **1M+** students, their teachers, and school administrators across the US and internationally.

#### Leadership & Delivery

- Lead a multi-layered organization of ~20 FTEs and contractors across three teams, including ~8 direct reports and a manager of two sub-teams.
- Drive cross-team architectural alignment, dependency management, and delivery execution across the Literacy Suite.
- Partner with Product, Design, and Curriculum leadership to define roadmap priorities and deliver high-impact, user-centered solutions.

#### Technical & Organizational Impact

- Champion adoption of AI-assisted development tools (Claude Code, GitHub Copilot) to improve productivity and code quality.
- Elevate engineering best practices, team health, and continuous improvement across diverse and distributed teams.
- Architect and oversee a multi-year effort to modernize 20-year-old monoliths, reducing operational risk and enabling faster product delivery across multiple teams.

### Software Engineering Manager

Remote

IMAGINE LEARNING

June 2023 - June 2025

Led the Literacy Data & Insights team, focused on developing user-facing, real-time reports within the Literacy Suite.

- Managed a team of ~8 software engineers and SDETs (mix of FTEs and contractors).
- Translated user-centered product requirements into scalable, maintainable implementations.
- Ensured alignment through quarterly PI planning, managing cross-team dependencies and engineering commitments.
- Led hiring for both FTEs and contractors and managed vendor relationships.

### Software Engineering Manager

Remote

SMILEDIRECTCLUB

June 2022 - June 2023

Promoted to lead the Core Services team responsible for internal services supporting user-facing products across the company.

- Drove technical alignment and prioritization across product, business, and engineering stakeholders.
- Served as the primary liaison between Core Services and the broader organization, ensuring clarity of communication and strategic alignment.

## Software Engineering Team Lead

Remote

SMILEDIRECTCLUB

August 2020 - June 2022

### • Prescriptions

- Led the transition of the Prescriptions domain from a monolithic Django application to an event-driven, service-oriented architecture.
- Delivered the Treatment Plan Service and shifted all functionality with zero downtime and minimal disruption.

### • Partner Network

- Overhauled SDLC processes to improve delivery velocity while reducing operational overhead.
- Led development of the Partner Portal supporting SDC's Partner Network initiative.

## Senior Lead Software Developer

Houston, TX

FRANCHICZAR

March 2019 - August 2020

Technical lead for all FranchiCzar products.

- Built and led a 6-person development team, including hiring, onboarding, and delivery leadership.
- Oversaw development of multiple products, including:
  - FranchiCzar OS – CRM for franchise-based sales
  - Fund.io – payment and subscription management platform
  - Rylos – learning management system (LMS)

## Software Engineer Team Lead

Houston, TX

GENE BY GENE

November 2017 - March 2019

- Led development of GenomX, a microservice-based platform for generating and distributing clinician-defined genetic test reports.

## Senior Software Developer

Houston, TX

DURWELLA

February 2016 - November 2017

- Delivered custom software solutions for science and engineering clients, including mobile apps, geoscience modeling tools, and domain-specific IDEs.

## Lead Software Engineer

Houston, TX

RIGMINDER

June 2014 - February 2016

- Led all software development, server administration, and operational support for RigMinder's product suite.

## Learning Analytics Engineer

Houston, TX

REASONING MIND

July 2012 - June 2014

Developed algorithms for educational data mining within the Reasoning Mind edtech platform.

## Education

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### Columbia University in the City of New York

New York, NY

PH.D. CHEMICAL PHYSICS (WITH DISTINCTION)

2012

- Dissertation: *Self-organization in systems of anisotropic particles*

### The University of Texas at Austin

Austin, TX

B.S. CHEMISTRY, HONORS (WITH HIGHEST HONORS)

2007