

Matthew R. Hanlon

LINKED IN: <https://www.linkedin.com/in/mrhanlon>

GITHUB: <https://github.com/mrhanlon>

Areas of Specialization

Full Stack Development • Typescript • React • Node.js • Ruby on Rails • PostgreSQL • AWS

Professional Experience

- 2022-present Principal Software Engineer, Zitti, Inc.
As a founding engineer, led greenfield development of a next generation back-office software platform for the restaurant industry, enabling smart ordering decisions using AI-powered pricing intelligence and easy management and payment of vendor invoices.
- Co-designed an industry-first data model to enable near real-time, cross-vendor pricing intelligence to help restaurants save money through informed ordering decisions
 - Led efforts to integrate Generative AI into the application; developed a chatbot to allow users to discover pricing trends and compare their prices with regional market averages; built AI features into internal processes to improve data quality and reduce customer onboarding time by 80%
 - Architected and built a flexible payments solution utilizing multiple payment rails to help restaurants manage their invoices and help vendors get paid faster
- 2019-2022 Lead Software Engineer, SchoolAdmin/Finalsite
Worked on a multi-tenant SaaS application for K-12 schools to manage their admissions, enrollment, and scholarship and tuition processes. Led multiple projects to reduce platform costs and increase customer engagement with the application. Worked with other engineers on project design and architecture, ran code reviews, and managed a contract developer team.
- Led implementation of a white-labeled Stripe Custom Connect solution, replacing Stripe Express, reducing customer payment processing fees, lowering platform costs, and providing customers a more integrated experience
 - Interviewed, hired, and managed a team of remote contract developers (US-based) to execute a post-acquisition rebranding effort that included upgrading and unifying UI frameworks across the application and re-implementing legacy javascript and Angular.js features in React
 - Led effort to upgrade an aging Solr cluster to SolrCloud, managed using Apache Zookeeper and deployed to a Kubernetes cluster, improving scalability, reliability, and search performance
- 2016-2019 Principal Software Engineer, Oracle Social Cloud, Oracle, Inc.
Worked on a multi-tenant SaaS application used by Fortune 500 companies to manage their social media brands and customer interactions.
- Developed integrations with social networks including Twitter, Facebook, WeeChat (China), and Line (Japan), which required change tracking of multiple third-party APIs
 - Profiled applications to identify performance issues; developed solutions to optimize code, caching, database utilization, and API calls, reducing cache misses and API calls by 50% and eliminating N+1 database queries
 - Dockerized our development environment to reduce developer ramp-up time and more closely replicate the production
 - Worked with a distributed, international team based in the US (Texas, Colorado, Georgia) and Hyderabad, India

2013-2016

Manager, Web & Mobile Applications, Texas Advanced Computing Center

Led development efforts for \$20M+ in scientific super-computing and cloud computing research grants at a tier-1 research institution. Managed a group of eight full-time developers and mentored graduate and undergraduate interns.

- Used Agile development principles to manage development of web, iOS, and Android applications
- Implemented configuration management, CI/CD, and software testing best practices
- Advocated for development standards across projects to improve code reusability and increase developer productivity
- Presented work at conferences and meetings across the United States and overseas

2010-2013

Research Engineer Scientist Associate, Texas Advanced Computing Center

Developed web applications to support researchers using high-performance computing resources.

- Developed APIs and services for monitoring activity and performance of supercomputing resources
- Proposed, designed, and deployed a data warehouse for analyzing usage patterns across thousands of projects, tens of thousands of users and tens of millions of jobs run on HPC systems
- Presented work at conferences and meetings across the United States and overseas

Education

MS in Computer Science, The University of South Alabama, Mobile, Alabama

BS in Mathematics, Spring Hill College, Mobile, Alabama

HONORS, & AWARDS

Outstanding Master's Thesis, University of South Alabama

Outstanding Graduate Student, University of South Alabama

CIS Graduate Fellowship, University of South Alabama

Presidents Honors in Mathematics, Spring Hill College

Hutchinson Award, Philosophy, Spring Hill College