Jacob **MacInnis**

Director of Engineering

Contact



(508) 244-1362



jacobmacinnis7@gmail.com



Rhode Island



JacobMacinnis.com



in/Jacob-Macinnis



JacobMacinnis



@jacobmacinnis

Hard Skills









TypeScript

Python

React







Node.js



Redux

Tensorflow PyTorch scikit-learn









LangChain Amazon LangGraph Web Services

GCP

Azure

Education

Certificate, Machine Learning Specialization

Stanford University

Software Engineering Immersion Program Thinkful

B.A. Child/Adolescent Psychology **Eastern Nazarene College**

Summary

Hands-on engineering leader with deep experience in architecture, development, and technical leadership. Proven track record of designing and deploying scalable, cloud-native applications. Adept at leading engineering teams, fostering innovation, and optimizing processes.

Completed AI/ML certifications from Stanford, DeepLearning.AI, Duke, and Google, combining strong theoretical foundations with practical implementation. Built and deployed models for image recognition, classification, NLP, transfer learning, RAG, and AI agents. Experienced with TensorFlow, PyTorch, scikit-learn, LangChain, and LangGraph.

Published 50+ technical articles on Medium covering TypeScript, Python, data structures, algorithms, and applied machine learning.

Professional Experience

Director of Engineering - OneView Commerce

Remote/Boston

Jun 2022 - Present

- Implemented global-scale development of cloud architecture supporting 4,000+ retail stores, processing 1M+ daily transactions.
- Implemented serverless architecture using AWS (Lambda, SQS, SNS, API Gateway), GCP Functions, and Firestore DB.
- Directed legacy migration to Firestore, leveraging DAO patterns & feature flags.
- Optimized deployment processes, reducing downtime from days to 1-2 hours with a 99% success rate.
- Oversee hiring, mentoring, and performance management of engineers across multiple teams.

Engineering Manager at OneView Commerce

Remote/Boston

Mar 2021 - June 2022

- Architected and led development on a globally deployed Application, enabling order, pick, and pack operations for retail. Designed a scalable, cloud-native backend using AWS, GCP, and Firestore, with a React/Redux frontend
- Engineered a multicloud backend monorepo by creating a cloud-agnostic platform, enabling AWS and Azure deployments, with future support for GCP
- Supervised teams of engineers, leading development efforts in React, Node.js, TypeScript, and serverless architectures.
- Mentored engineers, enhancing their soft and hard skills, product knowledge and ability to thrive in fast-paced environments and high pressure situations
- Communicate architectural concepts and guidelines to development teams and provide continuous knowledge transfer on the use of the OneView platform

Team Lead, Software Engineering at OneView Commerce Remote/Boston Jul 2020 - Mar 2021

Developed OneViews platform user management infrastructure similar to AWS IAM's users, roles, policies and permissions using AWS Cognito user pool

Notable Certifications and Courses

ML, AI and Data Science

- AI Agents in LangGraph: DeepLearning.AI [©]
- LangChain for LLM and RAG-based Application: DeepLearning.AI ⊚
- Machine Learning in Production: DeepLearning.AI [©]
- Managing Machine Learning Projects:
- Production Machine Learning Systems: Google G
- Machine Learning Specialization: Stanford **5** + DeepLearning.AI **○**
- Machine Learning with Python: freeCodeCamp (A)
- Machine Learning Tensorflow.js: Udemy û
- Data Analysis with Python: freeCodeCamp (A)
- Introduction to Large Language Models: Google G
- Artificial Intelligence and Business Strategy - Linkedin in

Leadership & Architecture

- AWS Cloud Solutions Architect: aws
- Cloud Architecture: Advanced Concepts: Linkedinin
- Software Architecture: From

 Developer to Architect: Linkedinin
- Transitioning from Manager to Leader: Linkedin in
- Software Architecture Foundations: Linkedin in
- Agile Project Leadership: Linkedin in
- AWS Serverless APIs and Apps: Udemy $\hat{\textbf{u}}$

Other Hard Skills

- Serverless Framework
- Firestore DB, PostgreSQL, Mongo
- Pandas, NumPy, Matplotllib, Seaborn
- Data Visualization & Data Analysis
- Data Cleaning & Wrangling Preprocessing

- Led overhaul dev team meetings by introducing structured agendas, focused discussions, action items —improving cross-team alignment and momentum.
- Designed and implemented scalable backend services to ensure product delivery using AWS Lambda, S3, API Gateway, and Firestore.
- Led a scrum team to develop enterprise headless and SaaS applications

Full Stack Software Engineer at OneView Commerce Aug 2019 - Jul 2020

Remote/Boston

- Developed a cloud agnostic integration layer, enabling faster development and reducing tech debt with single codebase for multi-cloud deployment
- Designed a wrapper interface that abstracted common cloud service concepts, dynamically mapping to AWS, Azure, and future cloud providers.
- Addressed security vulnerabilities from penetration tests, including XSS, function-level access controls. Improved API security key management

Full Stack Software Engineer at Insight Global

Remote/Boston

(contracting with OneView Commerce)
Feb 2019 - Aug 2019

- Built a curbside pickup solution for Kroger, enabling online purchases to be picked up curbside at Kroger or at Walgreens stores
- Developed SaaS and headless POS features, including UPC2, GS1 barcode handling, and mobile usb scanning
- Transform enterprise business requirements into agile deliveries, breaking down epics into sprint sized, vertical sliced increments

Other Experience

Function Earth (self start-up)

Remote/Boston

Nov 2018 - April 2019

- Built cross-platform React Native mobile applications for iOS and Android.
- Integrated Node.js backend with MongoDB and RESTful API endpoints.

Developer Apprentice at Thinkful

Remote/New York

May 2018 - Nov 2019

- Completed over 1,600 hours of intensive full-stack software engineering
- Deployed mobile first responsive web apps with Node, Express RESTful API, React.is and Redux clients, and Postgres and Mongo Databases
- Applied Computer Science foundations to implement complex data structures and optimize algorithms for performance in multiple projects

Founder & President at E-Prime Sourcing

Salem, MA

May 2015 - July 2018

- Founded and scaled E-Prime Sourcing from a solo operation to a commercial warehouse, generating \$1.29M+ in sales.
- Secured a 3M distribution deal, expanding across Amazon, Walmart, and eBay.
- Achieved \$857K+ in revenue in one year, fulfilling 41,357 orders.
- Built Shopify e-commerce website with 350+ products and multiple revenue streams, listing 800+ products on Amazon, 300 on eBay, and 120 on Walmart