Jacob MacInnis

Director of Engineering

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Hard Skills

TypeScript	JavaScript	Python
Amazon Web Services	Google Cloud Services	Azure
Node.js	React	Redux

Education

Software Engineering Immersion Program
Thinkful

B.A. Child/Adolescent Psychology
Eastern Nazarene College

Summary

Results-driven engineering leader with extensive experience in architecture, development, and technical leadership. Proven expertise in designing, building, and deploying scalable, cloud-native applications. Adept at leading engineering teams, fostering innovation, and optimizing processes.

Teacher, and mentor, with a strong track record of knowledge-sharing. Published 50+ technical articles on Medium, covering TypeScript, JavaScript, Data Structures & Algorithms, Machine Learning Fundamentals, GPTs, and AI.

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 from CouchDB 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

- Designed and implemented scalable backend services to ensure product delivery using AWS Lambda, S3, API Gateway, and Firestore.
- 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
- executed solutions for security vulnerabilities discovered in penetration testing, including function-level access controls, cross-site scripting (XSS), Improved API security by ensuring sensitive keys input by customers were only displayed upon creation, preventing unauthorized access

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

- 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
- Led initiative to transform ineffective developer meetings into productive weekly syncs by establishing structured agendas, facilitating focused discussions, documenting action items, and creating a platform for cross-team collaboration that improved alignment and project momentum

Other Hard Skills

- Firestore DB, SQL, Typesense
- Serverless Framework
- TensorFlow, scikit-learn
- Pandas, NumPy, Matplotllib, Seaborn
- Circle Ci
- npm, pnpm, nx, pip
- Data Visualization & Data Analysis
- Data Cleaning & Wrangling & Preprocessing

Notable Certifications and Courses

ML, AI and Data Science

- **Managing Machine Learning Projects** : Duke
- **Machine Learning in Production** : DeepLearning.AI
- **Machine Learning Specialization** : Stanford + DeepLearning.AI
- **Machine Learning with Python** : freeCodeCamp
- **Machine Learning - Tensorflow.js** : Udemy
- **Data Analysis with Python** : freeCodeCamp
- **Introduction to Large Language Models** : Google
- **Artificial Intelligence and Business Strategy for your competitive advantage** - Linkedin

Leadership & Architecture

- **AWS Cloud Solutions Architect** aws
- **Cloud Architecture: Advanced Concepts** : Linkedin
- **Software Architecture: From Developer to Architect** : Linkedin
- **Transitioning from Manager to Leader** : Linkedin
- **Software Architecture Foundations** : Linkedin
- **Agile Project Leadership** : Linkedin
- **AWS Serverless APIs and Apps** : Udemy

- Developed OneViews platform user management infrastructure similar to AWS IAM's users, roles, policies and permissions using AWS Cognito user pool
- Led a scrum team to develop enterprise headless and SaaS applications

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

- Engineered a multicloud backend monorepo by creating a cloud-agnostic platform, enabling AWS and Azure deployments, with future support for GCP
- 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.

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.js 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 distribution deal with 3M and expanded product reach across Amazon, Walmart, and eBay.
- Achieved $857K+ in revenue in one year, fulfilling 41,357 orders.
- Built an e-commerce website with 350+ products and multiple revenue streams
- Listed 800+ products on Amazon, 300 on eBay, and 120 on Walmart