# JONATHAN MADDISON

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## PROFESSIONAL SUMMARY

Staff-level engineer specializing in scalable front-end systems and AI integration. Expert in React/React Native, microservices architecture, and cloud deployment. Track record of leading teams, mentoring developers, and delivering complex architectural changes while maintaining velocity.

# **TECHNICAL SKILLS**

Frontend: React, TypeScript, Next.js, React Query, Redux, Module Federation, Webpack, Vite, Tailwind CSS, React Native, Expo, Native Modules, App Store Deployment, Mobile CI/CD

Backend: Node.js, Nest.js, PostgreSQL, Event-Driven Architecture, Domain-Driven Design

DevOps: AWS (Lambda, ECS, CloudFormation), Docker, GitLab/Github CI/CD, Monitoring

AI: OpenAI APIs, Local LLM Integration (Ilama.cpp), RAG Systems, Tool Calling, AI Enhanced Development

## INDEPENDENT AI PROJECTS

#### **Advanced AI Integration Projects**

2024 - Present

- Built React Native app integrating billion-parameter LLMs (Llama 3.2) locally on iOS devices
- Implemented RAG systems for semantic search and data analysis in government transcripts
- Developed Al-powered meal planning application with intelligent recipe generation
- Learned best practices for Al-assisted development and code quality

## PROFESSIONAL EXPERIENCE

#### Staff Frontend Engineer · Paige

2024

- · Led team building Al-integrated digital pathology viewer in regulated medical environment
- Spearheaded microfrontend architecture, reducing release complexity while maintaining compliance
- Established deployment strategies with site reliability team
- Successfully launched product securing major partnerships

## Senior Frontend Engineer · Paige

2021 - 2023

- Led feature development and performance improvements for digital pathology case management tool
- Architected and implemented frontend tagging system for client-facing product across our case management frontend and pathology viewer applications
- Collaborated with cross-functional teams on product functionality and UI/UX

#### Senior Software Engineer · Grasshopper Bank

Mar 2021 - Oct 2021

- · Led migration to microservices architecture with Nest.js, AWS Lambda, and event-driven patterns
- Implemented authorization service with flexible role mapping for banking requirements
- Mentored junior engineer while delivering full-stack solution on schedule

- Added essential features to the bank onboarding process and mobile application with React/React Native and Node.js
- Developed custom Native Modules enabling critical mobile functionality
- Led implementation of unified web/mobile deployment strategy
- Established automated testing improving release reliability across platforms

## **Software Engineer · OTTO Health**

2017 - 2018

- Led transition from Cordova to React Native for mobile applications
- Improved release process and reduced bugs in critical user flows

#### **Software Engineer · AlzCare Labs**

Jun 2017 - Oct 2017

- · Co-led a team of interns building FindMe app for caregivers and family members of people with dementia
- Used agile development methods including scrum meetings and sprint planning to improve team communication and deliver milestones
- Built reusable React Native component library with unit testing using Jest
- Implemented component styling and animations to design specifications

## **EDUCATION**

**Master of Public Administration** · University of Vermont (2011)

**B.S. Community and International Development** · University of Vermont (2009)