

# JONATHAN MADDISON

Burlington, VT | (802) 734-1161 | jonathanwmaddison@gmail.com

---

## 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 (llama.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 AI-powered meal planning application with intelligent recipe generation
- Learned best practices for AI-assisted development and code quality

## PROFESSIONAL EXPERIENCE

---

### Staff Frontend Engineer · Paige

2024

- Led team building AI-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

## Software Engineer · Grasshopper Bank

2018 - 2021

- 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

## EDUCATION

---

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

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