

Ethan Fulcher

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EXPERIENCE

Credit Karma

Senior Software Engineer

2026 - Present

- Lead the architectural design for a renewed authentication security access platform for login & account recovery, serving 9MM users daily
- Orchestrate the onboarding for new team members and contractors through knowledge sharing and technical review documents
- Modernized the corporate infrastructure for the team's front-end surfaces, optimizing for developer efficiency and tradeoffs for development speed & company-wide reusable pattern adherence

Software Engineer III

2024 - 2026

- Architected novel passkey authentication prototypes and ID verification systems, authoring comprehensive Technical Design Documents (TDDs) and executing the migration of critical micro-frontend applications to NextJS
- Led team AI adoption initiatives: auto updating team static site content based on meeting transcriptions, coding agent rulesets, and standardizing LLM tools for codebase quality
- Designed and migrated micro frontend applications to NextJS, led frontend design for passkey prototyping across Intuit and CK, and novel document verification

Software Engineer II

2023 - 2024

- Engineered identity verification logic and authored TDDs for multi-factor authentication (MFA), implementing protocols to ensure compliance with rigorous application security standards
- Orchestrated the technical migration of ~1.9MM user accounts, translating cross-functional stakeholder requirements into optimized login flows that maintained data integrity throughout the platform transition

Software Engineer I

2022 - 2023

- Drove monthly increase of 1,000 new users and 1.1MM new logins per month for 17MM in incremental revenue per year
- Used React to build ~50 member login & registration A/B tests to improve new and returning user metrics in React within micro frontend architecture, supporting the evolution of funnel optimization through close partnership with product and analytics

Michigan State University, College of Engineering

Undergraduate and Graduate Teaching Assistant

2019 - 2022

- Lead teaching assistant (nonconcurrent) for Big Data Analysis, Database Systems, and Discrete Math

PROJECTS

Test User Creation Dashboard (2023 - present)

Credit Karma internal side project

Architected a scalable internal platform facilitating the provisioning of synthetic user data for approximately 10,000 employees and 3,000 monthly active users, implementing an iterative development cycle through integrated feedback loops from cross-functional stakeholders to refine UI/UX functionality and backend data integration

Generative AI Social Media Text Model (2020)

Personal project

Fine-tuned one of OpenAI's GPT-2 unsupervised learning large language models to create new tweets based on scraped posts from a specified user's Twitter history (the output wasn't very good and I did not think LLMs would take off)

Scheduling Alert Queue (2020)

Personal project

Engineered a web automation framework that optimized polling frequency to monitor university engineering scheduling resources, integrating Twilio APIs to trigger alerts upon detecting availability state changes prior to project sunseting at the request of university IT team due to network load and policy

EDUCATION

MS, Computer Science - Michigan State University, College of Engineering

2022

Relevant Coursework: Artificial Intelligence, Natural Language Processing, Evolutionary Computing, Advanced Computer Networks

BS, Computer Science - Michigan State University, College of Engineering

2021

Relevant Coursework: Data Mining, Big Data Analysis, Algorithm Engineering, Internet of Things, Database Systems

SKILLS

Languages and Technologies: TS/JS, React, AI tooling harnesses, Python, GraphQL, A/B analysis, technical writing