# ERIC McCARTHY

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# PROFILE

I'm a web-centric software engineer with over 18 years of practice. I build superb experiences — for both end-users and my fellow engineers — using test-driven development.

# **KEY QUALIFICATIONS**

- Expert in JavaScript (15+ years), React (7 years), Node.js (10 years), HTML (20+ years), and CSS (15+ years)
- Highly skilled in TypeScript (2+ years), GraphQL (3 years), and unit testing with Test Driven Development (8 years)
- Deep understanding of frontend and backend concepts including RESTful APIs, BFFs, client-side state management, HTTP layer caching and web application vulnerabilities
- Extensive experience with CI/CD automation and software delivery
- Strong written and verbal communication skills with teammates, stakeholders, clients, and customers
- Some experience writing macOS and iOS applications
- Deeply care about both end-user experience and developer experience

# RESULTS

### Allstate Identity Protection — Remote

#### Senior Software Engineer, July 2021–Present

#### Software Developer, October 2018–July 2021

- Took the initiative on spearheading a number of transitions:
  - Broke-apart the subscriber portal from a single monolith into multiple micro-frontends, allowing teams to independently own their feature code
  - . Advocated for a branching strategy adopted by multiple teams to satisfy the needs of the business
  - Authored a Buildkite (CI/CD) plugin to automate merges and deployments with checks that have prevented multiple regressions from being released into production
  - Introduced TypeScript for new projects
- Acted as tech lead for multiple successful projects:
  - Transitioning the subscriber portal to use a back-end-for-frontend (BFF) model using GraphQL as part of the company's digital transformation to a microservices architecture
  - Architected and implemented solution to port the biometric authentication feature of Allstate Identity Protection's iOS and Android hybrid webview apps to work with AuthO
  - UI integration of the Allstate Digital Footprint into the PrivacyArmor subscriber portal
- Routinely collaborated directly with stakeholders such as product owners, UX designers, project managers, and engineers on other teams to help define work, promote quality, and develop realistic timelines

# DesertNet — Tucson, Arizona

#### Senior Programmer, June 2007–August 2018

#### Programmer, April 2004–June 2007

- Implemented core features for DesertNet's rapid web application development product, its popular content management system, and numerous high-traffic classifieds sites for newspaper clients
- Routinely interfaced directly with clients to determine their needs and troubleshoot issues

- Wrote numerous developer tools, build systems, deployment systems, programming language parsers, JavaScript modules, and even one compiler
- Scaled backends by modernizing systems, integrating CDNs, optimizing database schemas, optimizing SQL queries, tuning HTTP caching, building test suites, and creating performant microservices
- Improved security of login systems, including password storage and login tokens

# **EDUCATION**

### University of Rochester - Rochester, New York

#### Bachelor of Science — Computer Science, 1999–2003

Computer Science coursework focused on systems, including *Computer Organization*, *Computer Networks*, and *Programming Language Design and Implementation*. Was also a Teaching Assistant for *Introduction to Programming*, teaching students HTML and JavaScript.

# RECOGNITION

# Nominee, Most Valuable Teammate of the Year — Allstate Identity Protection, 2020

# Nominee, Tech Organization Energizer — Allstate Identity Protection, 2020

### Nominee, "SWEAT"iest Employee of the Month — Allstate Identity Protection, March 2019

Anonymous nomination letter reads in part: "Eric exudes calmness, positivity, and teamwork. ...He's constantly seeking a deeper understanding of our technology and our business. He's not afraid to speak up or try new things when he sees an opportunity for improvement, and his suggestions are always presented thoughtfully and constructively."

# ORGANIZATIONS

#### **Tucson ReactJS Meetup**

#### Co-Organizer, March 2019–February 2020

Monthly meetup for Tucson developers interested in React. Suspended due to pandemic.

#### **TucsonJS / Tucson Web Stackers Meetup**

#### Co-Organizer, September 2014–December 2018

Monthly meetup for JavaScript and web developers in Tucson.

# TALKS

# Serverless Introduction (Pre-Workshop Talk) — Tucson Web Stackers, November 2017

Overviewed AWS serverless offerings and details about the workshop activity.

#### Are Semi-Colons in JavaScript Useful? — Tucson Web Stackers, September 2017

Why you should feel okay about not using semicolons.

#### JavaScript, SVGs, and Cacti — TucsonJS, September 2014

The inaugural talk of TucsonJS. Explored generating the TucsonJS logo parametrically in SVG using JavaScript and a custom live coding environment.

# PORTFOLIO

Open source software and links to personal projects can be found here at https://unallocated.com/portfolio/

# SKILLS

# **Formal Languages**

### Fluent In

TypeScript, JavaScript, HTML, CSS, SQL, Perl, and C

#### Familiar With

Swift, Objective-C, PHP, and Java

# Environments

### Frameworks and Libraries

Node.js, React, GraphQL, Next.js, MUI, Apollo Client, and MobX

#### **Tools and Services**

Git, VS Code, npm, Jest, ESLint, Docker, Kubernetes, GitHub Actions, GitHub Package Registry, Buildkite, Istio, Envoy, MySQL/MariaDB, Xcode, Android Studio, and AWS

#### **Operating Systems**

macOS, Linux, and FreeBSD

# **Software Development and Work Practices**

Test Driven Development (TDD), Unit Testing, Agile (Scrum, Kanban), and Getting Things Done (a time management system)