

ERIC McCARTHY

<https://unallocated.com>

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PROFILE

Web-centric software engineer with over 14 years experience writing and deploying scalable backend services, user-friendly frontend interfaces, and productivity enhancing developer tools.

EXPERIENCE

DesertNet, LLC — Tucson, Arizona

Programmer, April 2004–June 2007

Senior Programmer, June 2007–August 2018

- Implemented core features for DesertNet's rapid web application development product, popular content management system, and a high-traffic classifieds site.
- Wrote numerous developer tools, build systems, deployment systems, programming language parsers, JavaScript modules, and even one compiler.
- Scaled backends by modernizing systems, integrating content delivery networks, 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.
- On-boarded coworkers to new systems while making them more efficient environments to work in.

Unallocated LLC — Tucson, Arizona

Owner, October 2016–Present

In evenings and on weekends, experimented with SaaS startup ideas, such as a service for storing and reviewing video from IP security cameras, utilizing various AWS services.

Suffolk County Police Department — Yaphank, New York

Web Application Intern, Summer 2002 and Summer 2003

Volunteered as a web application developer in the Identification Department. Improved existing mug-photo search engine and developed a similar application for Internal Affairs.

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.

ASSOCIATIONS

TucsonJS / Tucson Web Stackers

Co-Organizer, September 2014–Present

With a friend, started a popular monthly meetup focussing on JavaScript development topics. In September 2017 TucsonJS broadened its topic base to become Tucson Web Stackers.

Association for Computing Machinery

Member, January 2012–Present

Staying current on academic research to avoid reinventing the wheel.

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

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

SKILLS

Formal Languages

Fluent In

JavaScript (ES6 and newer), <ev>, Perl, C, SQL, HTML, and CSS.

Familiar With

PHP, C++, Objective-C, Java, Swift, and Lisp.

Environments

Frameworks, Libraries and Tools

Node.js, React, Redux, Webpack, Babel, npm, git, mocha, sinon, GraphQL, MySQL/MariaDB, Docker, Immutable.js, Emscripten, WebAssembly, Google Closure Compiler, XS (Perl xsub), PCRE, GLib 2, libvips, and Gyrobase.

Amazon Web Services

IAM, Lambda, API Gateway, AppSync, S3, CloudFront, CloudFormation, DynamoDB, CodeBuild, EC2, ECS, CodePipeline, Cognito, Route 53, KMS, and Rekognition.

Operating Systems

macOS, Linux, FreeBSD, and iOS.

Software Development and Work Practices

Test Driven Development, Pragmatic Functional Programming, Object Oriented Programming, and GTD.

PORTFOLIO

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