

>Michael K. Brewer_

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I'm a software developer with extensive experience in both front end and back end web development, database management, and a smattering of embedded systems. I have worked on many different applications on a wide variety of platforms, including Node.js, React, AngularJS, SQL Server, Postgres, MongoDB, and with a variety of languages including TypeScript, C# .NET, golang, and even a touch of Structured Text.

Most recently, I was a Senior Full Stack Software Engineer at ABL Space Systems, helping to build the mission control / ground systems software from the ground up. Built on a React frontend, dockerized golang microservices, MQTT, C# running on a PLC for timing critical processes, and a combination of QuestDB and Postgres. ABL's operators used systems my team and I built to test and launch the RS1 rocket.

Colleagues know me as a highly creative problem solver who works hard to get things done. I am often eager to hit the ground running, as I tend to find the best questions to ask once I have put in some time working with the material. I work well alone, but I'm at my best when collaborating with others.

Languages:

JavaScript,
TypeScript, C#, Go,
GraphQL, SQL,
Bash

Technologies:

React, websockets,
MQTT, Redux,
.NET, NodeJS, GIT,
SSH

Hosting:

Heroku, Linux,
(Minimal: AWS)

Methodologies:

Functional, OO,
SOLID, TDD

Experience

Senior Full Stack Software Engineer

Sep 2020-Aug 2024

ABL Space Systems

- Built "Perros", ABL's mission control software with React frontend, dockerized golang microservices, MQTT, C# .NET on a Phoenix Contact PLC, and telemetry storage in QuestDB and Postgres hosted in the cloud with AWS
- Developed the "Data Review User Interface" (DRUI) to provide engineers with rapid access to telemetry after operations, allowing light-weight data analysis through a React based plotting frontend via a golang API that retrieved data from QuestDB and Postgres.
- Supported launch campaign and test operations on console at PSCA in Kodiak, ensuring all IT systems were closely monitored, provided clear communications over radio to the Launch Director, and provided rapid troubleshooting when necessary
- Occasionally participated in interviews for team candidates.

Software Engineer

Jul 2018-Jun 2020

Automation Anywhere, Cognitive Team

- Developed key UI features for Community Edition and Trial product versions.
- Implemented core feature toggle strategy framework to eliminate separate branches.
- Iterated on UI features in React, Redux, ImmutableJS, Sagas, and thin Node layer.
- Conduct occasional interviews for developer team candidates.

Fullstack Developer

Jan 2018-Jul 2018

Mobiquity, Otsuka Team

- Fullstack developer with concentration on frontend AngularJS client and thin node layer.
- Maintain development standards and documentation compliant with HIPAA and GDPR.

- Conduct interviews for developer team candidates.
- Implement PR standardized checklist to enhance code quality.

Lead UI Engineer

Nov 2016-Dec 2017

Vrooz, Front End Developers

- Primary gatekeeper for pull request (PRs) reviews and merging.
- Reduced miscommunication, stale PRs, and lag time before QA review of feature branches. We have teams separated by a 12 hour timezone difference, which had presented communication challenges. I lead the implementation of a standardized checklist for PRs and SPOC channels for JIRA ticket updates.
- Hold regular meetings for FEDs to ensure communication of emerging standards, discuss potential architecture changes, and have fun with the team.
- Conduct interviews for new FED team candidates.
- Responsible for continued feature enhancements to our Purchasing Manager product, which processes over \$1B worth of purchase orders per year, using AngularJS, LESS, Babel, Karma, Jasmine, Gulp, on top of a NodeJS REST-ful middle tier.
- Ongoing refactoring of legacy AngularJS 1.3 directives into a AngularJS 1.5 component based architecture.

UI Engineer

May 2016-Nov 2016

Vrooz, Front End Developers

- Built customer registration and demo of our Purchasing Manager platform with enhancements to our legacy AngularJS 1.5 product and a whole new sign-up app using ES6, React 15.1, Redux, and NodeJS.
- Responsible for continued feature enhancements to our Purchasing Manager product, which processes over \$1B worth of purchase orders per year, using AngularJS, LESS, Babel, Karma, Jasmine, Gulp, on top of a NodeJS REST-ful middle tier.
- Ongoing refactoring of legacy AngularJS 1.3 directives into a AngularJS 1.5 component based architecture.

Software Engineer

Nov 2014-Apr 2016

SteelHouse, Engineering

- Implemented a Facebook retargeting ad platform using ES6, JQuery, PHP, CSS, and Postgres.
- Developed team standards for GitLab based code review and QA automation using CoffeeScript, Gulp, Chai, and Expect.
- Built internal dashboard tool for account performance metrics reporting using React, CoffeeScript, Node.js, and Gulp.

Software Developer

Jun 2014-Oct 2014

Hudl, Athlete Experience Squad

Pivoted our desktop and mobile web applications toward a social video sharing and recruiting experience for our 2.4 million athletes, who accrue 30 million monthly visits.

- Implemented a redesign in the home page and athlete profile page to have a mobile-first responsive HTML5 & SASS layout using BackboneJs and MarionetteJs on the client side and a C# MVC .NET backend with RESTful components and both MongoDB and SQL Server
- Interviewed athletes to identify pain points which were translated to app requirements
- Used a single page JS, non-redirecting Google content experiment to learn about site usage
- Continuous integration with GitHub and Agile SDLC averaged 1~2 releases per week

Database Programmer

Nov 2011-Jun 2014

UCLA Office of Compliance Services

Improved working efficiency and case tracking for a staff of over twenty health compliance auditors and the Chief Compliance Officer.

- Designed and prototyped a single page project management application using Node.js, Knockout.js, HTML5, CSS3, MongoDB, and SQL Server with a proprietary RESTful API
- Built an Access and SQL server solution with integrated contact management, audit tracking, and reporting for over 5000 audits per year
- Codified and automated the legal analysis in the event of privacy breaches through an Access based reporting tool with built-in decision tree algorithm based on the compliance legal requirements. The application resulted in 30% cost reduction
- Supported a complete overhaul of a 20 year old medical record software housing over 1 million patient records through providing detailed analysis of auditing functionality and fixing bugs

Programming Consultant

Jan 2014-Dec 2014

Sammy's Boutique (<http://sammysboutique.com>)

Launched the eCommerce fashion start-up and supported ongoing maintenance.

- Launched the site on Shopify eCommerce platform
- Customized JavaScript and CSS for site features including user review, recommendations, checkout flow, homepage carousel and marketing popups

Programming Consultant

Oct 2010-Oct 2011

Hamlin Emory, M.D. (<http://www.dremory.com>)

Modernized research data tracking and provided statistical tests for research hypotheses.

- Organized decades worth of text file and paper file medical records into an Access database
- Performed statistical hypothesis testing of physiological anomalies and treatment-response patterns for hundreds of medical metrics and dozens of therapies
- Built Excel/VBA app to automate data cluster identification

Programmer/Analyst

Jan 2007-Nov 2011

UCLA General Services Information Systems

Built many different applications to serve the business needs of a 1000+ staff body across 20+ departments including Fire, Police, Construction, Warehouse, Transportation, etc. My role was split 50/50 between 2nd tier help desk support and programming.

- Built a VBA app that reduced administrative errors in work tracking, saving \$40k per year in overtime costs
- Launched a materials safety database and C# MVC website to facilitate communication of safe handling of hazardous chemicals throughout the UCLA campus
- Implemented a Windows Mobile app to aid Fire Marshals in documenting fire hydrant maintenance

Help Desk Technician

Apr 2003-Jan 2007

UCLA Facilities Management Information Systems

Role split 80/20 between help desk and programming.

- Developed an Access application for inventory management, purchasing, and rental tracking. Interfaced with our enterprise work order management system, time and attendance system, and purchasing system
- Maintenance for an aging PHP and PL/SQL based billing system
- Developed a recycling pickup scheduling app in Access

- Handled over 16k customer support calls and first tier server ops tickets

Webmaster

Oct 1998-May 2001

BidAmerica

Built business tools and a website that helped grow this start-up to double its gross revenue three years in a row.

- Created MS Access based tools that reduced data entry time by 90%
- Implemented an ASP website with JavaScript driven web forms
- Built and maintained IIS server

Education and Certifications

- IEEE Computer Society CSDA, 2011