

# MICHAEL ROSACK

## ROSACK SOFTWARE SOLUTIONS, LLC

W6683 Spring Green Place, Greenville, WI 54942 - P: 920-246-9152 - E: [mike@rosacksoftwaresolutions.com](mailto:mike@rosacksoftwaresolutions.com)



### SUMMARY

Experienced Solutions Architect with a proven track record of creating scalable, reliable systems from the ground up.

### QUALIFICATIONS

20 years of experience in the software development industry. Fluent in many languages, frameworks and clouds, and able to learn new ones quickly.

- Deep experience with all types of Javascript development, from Angular/React front-end dev to GraphQL and other server-side Node technologies. Well versed in .NET development in a former life, also very familiar with the Java and Unix worlds.
- Enthusiastic about designing systems - building object models, data stores and user interfaces to create intuitive, scalable solutions.
- Excellent communication skills - Ability to work with customers to flesh out requirements and build a product that meets their needs and exceeds their expectations.

### PROJECT WORK as ROSACK SOFTWARE SOLUTIONS, LCC

#### Breakthrough Fuel - Green Bay, WI - August 2020 to Present

- **ZeroMe:** Worked on API, web portal and mobile application for [zerome.com](http://zerome.com). The portal and mobile app were developed in React, using React Native and Expo on mobile. The API is graphql-based with an Azure CosmosDB backend. The project has a dynamic question metadata solution for calculating user carbon emissions which I was heavily involved in.
- **AskFELIX.com:** Brought in near the end of development for [AskFELIX.com](http://AskFELIX.com), a rewrite of Breakthrough's main customer-facing application. I lead the development of an updated pricing system to take over from a bunch of manual legacy processes that had yet to be replaced in the new platform. I was also investigating integration of alternative fuels into the platform as part of the pricing process. All development was in Node/React/GraphQL with a PostgreSQL database in the Google cloud.

#### Greatland Corporation - Green Bay, WI - Feb 2018 to Feb 2021

Modernized [yearli.com](http://yearli.com) to run in the Azure cloud instead of on premises. My main focus was on the form validation engine/UI - the main concern was being able to have a highly functional UI that could run the same full validation that was done on the backend. We developed a custom metadata solution to create the business logic and transpiled the validation engine to Javascript using bridge.net.

#### American Airlines / PSA Airlines - Dayton, OH - June 2017 to Present

Developed various line of business apps to digitize manual processes.

- **Planning Validator:** Utility web application for plane maintenance staff to schedule maintenance for the fleet. ASP.NET Web API backend deployed through Azure Functions with an Angular frontend.
- **Crew Mobile:** Crew Scheduling mobile app used by pilots to arrange assignments, vacations, and other requests. ASP.NET Web API backend deployed through Azure Functions with a Xamarin frontend deployed to iOS and Android.
- **Electronic Dispatch Release:** Web app used by pilots to review flight dispatch information and approve it without manually printing and signing the release. ASP.NET Web API backend with an Angular frontend.

#### Play Your Damn Turn

Asynchronous multiplayer (Play by Email) turn broker for Civilization 6. Allows users to play games of Civilization 6 at a relaxed pace without all players having to be online at the same time. <https://www.playyourdamnturn.com>, source code at <https://github.com/pydt>.

PYDT is a full-stack Javascript application deployed to AWS and running entirely in Lambda using the Serverless framework. The API uses the [tsoa framework](#) to help create OpenAPI documentation and help with dependency injection. Data is stored in DynamoDB and S3, and all the usual AWS suspects are used to tie the room together. The web UI and

client application are built with Angular, and the client is packaged with Electron allowing cross-platform deploys to Windows, OS X and Linux.

## Volt Stats

Online statistics tracking for Chevrolet plug-in vehicles like the Volt and Bolt. <http://www.voltstats.net>

Volt Stats stopped updating data in 2021, but while it was active it interfaced with the Onstar partner API to pull data from registered users' vehicles twice daily. Data was aggregated and analyzed, allowing users to track their fuel efficiency, earn achievements for meeting driving milestones, and compete with other users for bragging rights! The data was displayed on an ASP.NET MVC website with heavy usage of jqPlot and d3.js for data visualization and DataTables for dynamic grids.

## PROJECT WORK through OMNI RESOURCES - Appleton, WI - 2011 to 2017

### Dodles, Inc – Social Drawing Startup

A cross-platform (web/iOS/Android) application aiming to be a leader in social drawing and animation.

- Assisted in designing a large AWS backend architecture using NodeJS on Beanstalk, ECS, Aurora, S3, ElasticSearch and ElastiCache. Backend was designed to accommodate millions of active users.
- Architected cross-platform drawing engine using libGDX that could compile to all 3 platforms. Dove deep into libGDX internals, especially for the HTML targeting, which required detailed knowledge of the Java -> Javascript/WebGL transpilation process using GWT.
- Designed Angular 1 web frontend to host the social portion of the application.

### Miller Electric - Insight Core Cloud Reporting Solution

A Windows Azure based application that allows companies to analyze the usage of their welding equipment to increase quality and efficiency. <https://insight.millerwelds.com/>

- Built scalable SQL Azure cloud service to listen for messages coming in from devices in the field and queue them for processing.
- Developed a SQL Azure worker role based data warehouse that processed the messages queued by the front end service in near-real time, analyzed them, and stored them for reporting. Used a highly customized version of Entity Framework for data access.
- Created ASP.NET MVC frontend that allowed users to configure their devices and view reports. The frontend relied on many open source libraries such as Twitter Bootstrap for the general HTML framework, Highcharts for reporting and Datatables for sortable, interactive grids.

## EDUCATION

**B.S., Computer Science** - Georgia Tech - Atlanta, GA - 2004

## CERTIFICATIONS



- [AWS Solutions Architect Professional](#)
- [Azure Solutions Architect Expert](#)
- [AWS Developer Associate](#)

## ACTIVITIES AND INTERESTS

Electric vehicles, 3D printing, golf, bowling, fantasy sports, traveling and good food!