Overview of Projects

Jonathan Mares

Updated Feb 2017

Current Projects

AT&T API Automation Project

I am currently working on a project for LiveU (a live TV streaming startup based in Israel) to automate choosing SIM data plan sizes based on usage and some additional constraints. The core use case is to set hundreds of SIM plans every month using the AT&T API. This will be executed as a job with Celery, a task queue for the Python ecosystem. Jobs will be managed by a Flask web application on a Docker container, which will be hosted on AWS. I'll also a build a UI with React for the business owner to manage SIM optimizations. I will be building everything myself, under the superivision of the VP of Engineering.

Zaferon Website Build and Technology Consulting

For the past year, I have been working alongside my partner with a new restaurant, <u>Zaferon Grill</u>, located in Verona, NJ. I have been leading all website / technology efforts on behalf of the business. This has included:

- 1. searching, installing, and configuring appropriate technology solutions, such as the POS computer system.
- 2. Building restaurant website
- 3. Meeting with vendors such as Yelp, Opentable, and Revel to discuss technology needs for Zaferon
- 4. Managing all online accounts Google Business, Yelp, Twitter, Facebook, etc

Our approach for building Zaferon's website was to find a well designed template, convert it to a Jekyll project, and deploy it on Github Pages. This approach has a few key advantages - hosting is free on Github (Jekyll projects also work seemlessly with Github Pages) - and Jekyll projects simplify the developer experience by reducing code duplication with Liquid template rendering. Building a static page is sufficient for the restaurant's needs, as additional features such as managing reservations can be handled with Javascript widgets built either by Yelp or Opentable. In addition, this approach saved the client money as compared to using a traditional web design company.

CS411 Databases Project

This course at the University of Illinois at Urbana Champlain has a semester long project, where groups of 4 students build a web application. We are currently in the process of designing / sketching out an Ebook clone. We plan to use ES6 JavaScript for the app - Express for the backend, and React for the frontend. Since I've been looking to work with React, I'll be the primary frontend developer.

Learning

I am working on learning React and Redux. Some of the resources I have been using include Rangle.io learning sessions and the 30 Days of React ebook. I plan to use React in a few of my current projects as well.

I'm also working through this React Native + Meteor course to get a better understanding of how to build apps with React Native. I like this approach because the iOS development experience is better with React-Native and I enjoy working with one JavaScript codebase for both Android and iOS.

Finally, I recently came across a podcast with David Heinemeier Hansson, the creater of Ruby on Rails and just finished his latest mini-book Rework. Since so many companies use Rails in production, I plan on learning how to develop applications in Rails via a personal project and some tutorials.

Previous Projects

Wayfair Address Book Rebuild

As a summer intern, the customer facing address book redesign was my primary project. I focused on converting this part of the application to Wayfair's MVC standards. Briefly, Wayfair's tech stack is PHP on the backend, Backbone + Tungsten.JS on the frontend, and Mustache templating on both the back end and frontend. I utilized the existing Address Model and wrote a Controller to accept add/remove/edit actions from the frontend. I wrote Mustache templates, a Backbone model and controller, and implemented <u>TungstenJS</u> on the page for fast client-side DOM updates.

Pfizer Drug Dashboard

I designed and implemented an internal full stack JavaScript web app in MeteorJS. I converted customer business requirements such as drag-and-drop and mobile compatibility into technical specifications.

I chose Meteor because it has proved to be fast and efficient to build applications rapidly. The frontend and backend connect very easily in Meteor. Blaze front end rendering is very simple to work with and community packages drastically reduce the time required to build typical web app components such as forms, authentication, and routing. In addition, you get many tools as a developer out of the box - live reload, code

minification, direct deploy to Galaxy, etc.

Here is a list of some of my tasks:

- 1. Designed UI with Materialize & built frontend with the Blaze JavaScript library
- 2. Utilized Meteor & npm packages such Autoform, iron-router, & dragula.js
- 3. Stored data with MongoDB & enforced schemas with simple-schema package
- 4. Configured custom deployment on Red Hat Linux with Passenger

I was the sole developer on this project. I'm happy to show a demo of this project upon request.

Website Build

To build my personal website, I searched for a well designed template that implemented Material Design standards, which I am huge fan of. I converted the page to a Jekyll project to take advantage of templating and abstraction. I also tweaked aspects of the design to my needs.