

Tuesday Dec 25

Final push before going to Ashland. Upon return, work on a better understanding of building and deploying Docker files to the Docker hub in the context of the ports, connecting to k8s containers from the outside, and working with Ingress in the context of web based systems including web servers like Node's express, go web servers, nginx etc...

Sunday Dec 23

So I have redis running inside my k8s cluster on microk8s and I am able to shell into the cluster via bash and run set and get commands. I also went through the exercise of doing the port forwarding so I had to get redis running on the digital ocean instance and figure out how to start and stop the redis-server via the **systemctl** commands. So things are looking good for microk8s as far as a way to very quickly spin up, test, and run pods in a k8s cluster. Good work ! Now lets keep going...

Wednesday Dec 19

First day back to work after taking off slightly less than a week dealing with the flickr switch away from unlimited storage. I now have my ducks in a row, and today got back into work. It was a very good day. The microk8s snap works great. I am not sure how I decided to give it a whirl, but I am very pleased. Minikube is absolutely broken, and microk8s rocks big time. A HUGE win for my k8s efforts moving forward. Its clean, appears to be reliable and exactly what the doctor ordered. Today is the first day ever mentioning microk8s in this blog.

Tuesday Dec 18

Took about a week off to focus completely on our photos. Flickr was bought out by SmugMug so they discontinued the free plan, meaning I had to do a lot of juggling to tuck my pictures in some different cubby holes. This takes TOO MUCH time, but its kind of fun.

Wednesday Dec 13

Wrote up a sheet on all of the kubectl actions and objects and what they do. Spending more time looking at the api and starting to do these examples on digital ocean.

Friday Dec 7

I am finally starting to understand what kubernetes actually does. I think I got it about a week ago, but now I think I got it a bit better.

Thursday Dec 6

Spent a day or two on helm and realized it wasn't ready for prime time. Today I got k8s src code up and running on my mac and was able to run random k8s golang tests. I am also starting to read more about k8s and therefore starting to get a better understanding.

Monday Dec 3

Golang templates in the context of better understanding helm.

Sunday Dec 2, 2018

Hb is going to Belknap today with Reenie and Diana. I am getting deeper and deeper into k8s. Note, this is the first ever mention of k8s in this blog. I am impressed with this whole technology and what it can do. Right now I am into helm, the kubernetes package manager. I think I discovered it 2 days ago on Friday evening. Just keep going, this could be your next "big thing", k8s that is and more importantly containers and container orchestration in general.

Monday Nov 26

So here we are just after the Thanksgiving holiday and we had a long talk with Scott on my birthday about Docker after having come up to speed on that and now I am getting myself into a big Kubernetes furry. So we are making big progress on getting our feet wet on all of this stuff.

**Note on comparison of React / Vue versus Cloud infrastructure software**

Friday Nov 16

Not sure where the right place to put this note is so here is as good a place as anywhere. I came up with an insight this morning that might have some merit. The relevance of this note is slightly tied to an analyst looking at Zillow and their new adventure into buying houses called Zillow Offers and he said that that particular business plan does not scale well. It might be true that programming in React / Vue doesn't scale that well either because even though you know front end development the process of developing a new project from a UI point of view requires a complete reboot / rewrite from the beginning each new project you take on whereas in the cloud infrastructure space the understanding of how to build lego blocks and deploy them to the cloud simply requires adding in your new piece of code that a

particular customer wants deployed and pulling in all of the other stuff you already know. The modularization of the React / Vue concept is a good one but the actual implementation is still very challenging where as in the system administration world the tasks that you are asked to do are actually fairly mundane once you understand them in an intimate way. So the snappy, container, docker, kubernetes world scales possibly better than the React world. Just a theory for now, but something interesting to keep in mind.

Thursday Nov 15

Watched 2 good videos on YouTube about containers, Docker, and Snappy. I got Docker up and running today and was able to easily run Redis.

Wednesday Nov 14

Docker now up and running on ubuntu. Wrote some automation bash scripts today as well to come up to speed quicker on a new DO ubuntu instance. I now have both 18.04 and 18.10 up and running on DO. I like Digital Ocean **alot !** I am a very happy customer, and its easier to use than Amazon.

Monday Nov 12

Got runc and containerd built on DO and able to run both and show the version. More work to be done.

Thursday Nov 08, 2018

Back from Pittsburgh and getting into almost signing up for an account at Digital Ocean to start working on Docker containers,

Kubernetes, and in general container software technology written in the Go Language. Stay tuned. This is day 1 of possibly signing up for Digital Ocean. Done, I now have my DO account with a \$100 credit.

Friday Nov 02, 2018

So here we are back in Pittsburgh, its been an eventful almost 2 weeks and I am headed back home on Monday in a few days. I did no work the whole time I was home. But it is possible that the decision I made today might guide my research going forward. [It was this announcement](#) that Hashicorp was getting 100 million dollars in a funding round valuing the company at just shy of 2B; and the announcement earlier in the week that IBM was paying 34B dollars to buy RedHat that motivated the business decision I am making today. The decision is to re-focus my UI efforts now on cloud software infrastructure including work from Hashicorp, CoreOs, and any other rock solid cloud open source platforms written in Golang.

See the [/media/top/worklog14](#) and [/media/top/worklog15](#) posts as well to get a better handle on my golang history.

Last time I got into Golang, was back in late April 2017, since then I have been programming in Javascript and working on the front end with React and most recently Vue. I targeted my Golang efforts mainly on the blockchain world, more specifically Ethereum. I also initially spent quite a bit of time working on etcd. My Golang efforts began, now I remember, at the tail end of my tenure with Spinnakr when I rewrote one of our products in golang. I had been working on golang for a bit and decided when I was in Ashland in November of 2014 to crank out another version of the [Spinnakr code in Go](#).

Tuesday Oct 16

Bootstrap Vue uses the Vue plugin architecture which appears to be a good way to go.

Saturday Oct 13

I now understand and how Element pulls in the scss and uses it in their code. Its pretty clean and simple. Need to add in an element button to the vuex shopping cart example.

Thursday Oct 11

Day 2 of vue, learned about vue serve. got 2 examples up and running with this concept which is cool... You can serve up a vue file and it pulls in everything else and runs it similar to create-react-app.

Wednesday Oct 10, 2018

Continue the biggest deep dive of my life into CSS, I am taking this seriously. Today looked at the display property in depth, and for the first time in my life looked at the css default browser values. Day 1 looking at Vue. This is the first mention of Vue and is motivated by a meeting last evening at the Tuesday market with Brett Ansie <[brett@zabaat.com](mailto:brett@zabaat.com)>. He came up here to speak with Michael and Cheryl about doing a local currency app; and I got to talking to him about Vue, Firebase and other sundry topics. Since I am launching into CSS I may as well better understand how Vue does styling as well. My first hit is this may be a good choice.

Tuesday Oct 9, 2018

Started working with Codepen as a development platform to better understand CSS examples. For starters, I am going over the [flexbox tutorial](#) and playing around with all of the different parameters.

Saturday Oct 6, 2018

So we are dropping (for now) all attempts at looking at backend graphql servers to focus more on CSS, bootstrap react integrations, and in general how CSS gets incorporated into React. Focus, focus, focus...

Friday Oct 5, 2018

Back from a 10 day adventure in eastern oregon. including belknap, prineville, john day, pendleton, wallowa, and prairie city.

Friday Sep 21

So we finished up the Auth0 work and are now moving on to graphql client and server work. It appears that I should be able to get a graphql server up and running fairly easily. We are heading off to eastern oregon but upon our return we will continue down this path.

Monday Sep 10

In the past couple of days I have been spending time on 2 main areas:

- Authentication
- Mongoddb

These are the 2 key areas I will concentrate on until a clear plan evolves upon which to move forward. This work could possibly be in relation to the future jobs web site which will need both storage of json data in mongo and the ability to know who my user is by way of logging in.

Tuesday Sep 4, 2018

Starting to take a look at Gatsby and Netlify. Hb is in Sacramento for the week spending time with Pat who was in the hospital for a few days.

Saturday September 1, 2018

***I am moving on to my next gig !***

So there comes a time when you can say part A is done and now it is time to move on and do part B. The Material-UI Tutorial project is now officially done and I moving on to starting to work with Netlify or some other serverless architecture in the context of all the things needed to do the stuff I am *not already doing*. Like adding content in the context of a new Job listing, or doing payments in the context of a payment API, or authenticating with github or some other login mechanism.

Here is the history based on this blog...

08/16/16 Fired from BuzzSumo at 9AM.

08/27/16 Noms

01/10/17 Ethereum

05/01/17 First mention of React

10/03/17 First mention of Material-UI



09/01/18 First mention of Netlify and [Serverless](#)

11/26/18 First mention of Kubernetes in concert with Docker

Friday August 31, 2018

Matt Brookes reviewed my tutorial and gave me his feedback. I fixed everything he told me to fix and redeployed the tutorial. In the evening I started to take a peak at Netlify.

Thursday August 30

More tweaks to describing how to edit the tutorial document as well as adding a HOME link to both mui-drawer and ghw-drawer.

Wednesday August 29

First release of Material-UI Tutorial to a few folks including Matt Brookes @mbrookes. So things are basically done for now, and I will let the next step evolve as it may.

Thursday August 16

For the past number of days I have been working on the tweaks of deploying to Github Pages. Found a massive bug related to the ghw-drawer where it was working on localhost but not deploying to gh-pages. So we figured that out. Also started working a new Arcadian Group Blog / Website.

Friday August 10

Massive effort on getting all of the repos under one umbrella namely [mui-tutorial-demo](#) along with getting the [mui-tutorial](#) cleaned up as well. We should be completely finished with this

project by the time you go away in about 10 days. Hopefully, in the next couple of days I will start by rolling it out to a few individuals.

Thursday August 2, 2018

Massive coding effort getting all of the repos in the material-ui tutorial ready for the release of the tutorial document. Continue working on the document.

Saturday July 28, 2018

So we are working on both the cards in mui-file and porting those over to ghw-menu. Today I mainly worked on figuring out how to display the GhCardViewHorizontal correctly when there is only 1 or 2 or less than 6 users. I also yesterday broke out the GhCardViews into their own components so they are standalone and then this led to being able to debug their CSS standalone in mui-file and then copy them over to ghw-menu when they were working correctly. Lots of progress being made. This is a good thing.

I also decided to remove the Admin menu tab from ghw-menu and put it somewhere else and get it working.

July 25

Finished up mui-view then on to mui-md and now on to mui-text.

Weekend July 23

complete mui-view to standardize the way code works with independent views in a tutorial setting...

use this code base as the start for mui-md and integrating markdown into material-ui. the only other approach is to use typography

Tuesday July 17

Starting to work on writing out the **pinnedrepo** json data structure to redis for a particular github user.

1. avatar
2. location
3. name

The following keys are already in the redis hashmap

Friday July 13, 2018

Huge progress this week on writing up the docs. I am using spec-md and loving it for writing documentation. The numbered sections rocks. Jason and family in town since Tuesday.

Friday July 6, 2018

Code is falling into place. Starting to think about writing up some docs and integrating the docs in with the application.

Sunday July 1, 2018

After weeks, and weeks of working on my code I got react-router-redux working with florida-mui-menu. Now, I can select a chapter and see things change correctly when I switch the chapter from 1 to 2. This is going to be relevant with the

github data visuizlizer as I want to keep the same view but change the underlying github repository.

Thursday June 21

Following up on yesterday's HUGE WIN of getting **node\_modules** figured out in a central repo at the top level of /tmp12 or whatever repo you are currently working in is gigantic. Its yet another example of the maturing process of your profession. I had it figured out for GO, but didn't take the energy to truly figure it out for node.js. What other things are you missing. Its really in line with my Joseph Campbell studies which is now happening in my life in parallel.

Wednesday June 20

MASSIVE github repo cleanup.  
reduced the number of repos down to 112.  
I don't believe its been this low in years. Really !

Now that I have my development down further.  
I am finally committed to keeping the stormasm  
repo relatively clean from fluff.

Its just my sign as a more mature software engineer.  
We still have LOTS of work to do.

Finally got /tmp12/node\_modules  
folder figured out with .yarnrc  
we now finally, after more than 1 year have a central repository  
concept for node\_modules. This is very good news !

Tuesday June 19

Menus are working and understood. Now move on to getting the dropdown Picker / selector working. So that I can change the chapter but leave the section the same.

Friday June 8, 2018

Start out by getting the simple florida mui system working with Menus instead of drawers.

Work on porting AppDrawer functionality over to a Menu system. Eventually will document how to seamlessly move between the two concepts.

Wednesday June 6, 2018

Finished completely documenting [graphql-redis-github](https://github.com/stormasm/mui-card-file).

Now moving on to porting to github-worlds from the following repos:

- <https://github.com/stormasm/mui-card-file>
- <https://github.com/stormasm/mui-autocomplete>
- <https://github.com/stormasm/keybox>
- <https://github.com/stormasm/checkbox>
- <https://github.com/stormasm/redux-checkbox>

And combining these concepts into one final deliverable repo...

Tuesday June 5, 2018

We are temporarily done with Redux moving back to Github worlds; and then putting all of the pieces together.

Monday June 4, 2018

Last night I saw a rumour and this morning it was confirmed that

Msft is buying Github for 7.5B.

Friday June 1, 2018

Worked at Bina's in the morning trimming back the black berries around the currants. Last week I did the blueberries. More work on redux. I am making progress on understanding this stuff, after my first foray into redux last autumn with Receipt. The most basic simple checkbox is now working in the redux world.

Monday May 28, 2018

Huge push back into understanding React from the beginning going through and reading all of the docs from the top. Now it all makes sense, finally after one year. Amazing how LONG it takes to learn these concepts and ideas.

Monday May 21, 2018

Huge push back into understanding Redux, and using it extensively going forward in my current and new projects.

Wednesday May 9, 2018

[mui-autocomplete](#) and [mui-card-file](#) are completed. I am now moving on to dealing with selecting json files from a github directory; details to follow.

Friday April 6

So I have the cards up on the screen and they look good enough now to start getting real data. The current working version is called [ghw](#). So I am now ready to go back and get the data from [graphql-redis-github](#). I only need several pieces of information.

Tuesday April 3, 2018

So here is the summary so far. While I was in Florida I finished up getting mui working with the Drawers. Yesterday I re-instated

that code to the latest version of mui. Mui is still not at 1.0 so until that happens I will be continually updating the code. While I was in Florida the repo was called **react-router-mui**. The new repo is called **florida-mui** to reflect the work I did in Florida but with an update. To find this 2 repos quickly in your github simply search for the term Florida. This work exclusively focuses on having mui run in a create-react-app container instead of the off the shelf next.js and uses react-router for its routing instead of the built in router code with next.js.

Between the time I got back from Florida and now I have been working on the server / graphql side of the world specifically getting the data from github. I have completed that work.

I am now moving on to visualizing the github data that I will be pulling from graphql. I have decided to start out by representing the data with the simple off the shelf mui components including

1. Cards
2. Chips
3. Grid Lists

They should all be able to work off the same json data structure.

Wednesday March 28

I have decided (for now) not to BREAK OUT the graphql queries into separate files mainly because for now from a code point of view the queries are called query and the code references and similarities are similar by all referencing that query const locally. Also, I do not fully understand the AST concept and how GraphQL queries are represented internally. I spent a few hours yesterday trying to understand and possibly breaking out into separate files similar to [Githunt-React](#) but after much review on the concept

and the pros and cons of doing it I made an executive decision to leave the queries and the code coupled. And in thinking about it further it might actually be the way to go anyway. Similar to how the global CSS file is being replaced by local CSS as in the concept of [JSS](#).

Tuesday March 27, 2018

Massive code cleanup of grg [graphql-redis-github] in preparation for our trip to Yachats for the rest of the week.

Sunday March 25, 2018

[graphql-redis-github](#) is now working with multiple cities.

Friday March 23, 2018

So I now have the whole cursor pagination concept figured out and I am parsing across all of the corvallis and bend location queries on github. I am grabbing all 622 users and organizations who have a location of corvallis and storing all of the user names in a redis set and the individual users and organizations in a hashmap with the key being the login name and then a bunch of fields related to that particular user or organization.

I am having an issue with the Apollo fragment matcher but will defer dealing with this particular issue for awhile, stay tuned.

Wednesday March 14, 2018

Also know as PI day because of 3/14

I just learned that for the first time today.

Hb and I went out to Lacombe, OR for the first time to the Larwood Covered Bridge and the Roaring River County Park.

Saturday Mar 03, 2018

Upon return from Pat and Patti's house in California earlier in the



week I dove right back into GraphQL as well as GraphQL in relation to the Github API. Also began looking more at Typescript and CSS based on the pointer from William Wagner, Patti's daughter's husband who I had a conversation with while I was at the birthday party at the winery.

This is the ***first mention of Typescript*** and I should mention that both GraphQL and Apollo use Typescript heavily if not exclusively. Facebook does not use it, but instead they rely on the Flow library instead. I think I prefer Typescript over the Flow library.

Saturday Feb 17, 2018

Finished up GraphQL introduction for now and started working on reading data from the Github API in Javascript and practiced the concepts of the async / await idea.

Thursday Feb 15, 2018

More work on GraphQL in the context of building simple servers and querying them along with standalone graphql examples.

Tuesday Feb 13, 2018

Day one of Apollo and its very nice complete tool set for graphql. When I was in graphql land prior, many months ago, I wasn't interested in the javascript server side tools and I was not as familiar with the Javascript world. Coming back to it now, I can see how valuable the Apollo tools are; and therefore will spend some time coming up to speed on them.

To level set all of this stuff, we are doing this to eventually get back to React, but this time with something interesting to build and a server side in place.

Monday Feb 12, 2018

Start spending time reading the Javascript book @YDKJS in preparation for learning Javascript better and being able to pass some code tests and coding better and efficiently.

Sunday Feb 11, 2018

Day 1 of Server side Javascript work in relation to initial work recently of doing authentication with MongoDB. Starting to look at how async / await function calls work.

Friday Feb 9, 2018

I am back from Florida. I got back late Tuesday evening. Hb flew into Portland from ABQ and I came in from Florida. I met an interesting man from St. Louis to Portland who was 77 and has been in the furniture business for 52 years. He was a good role model for me about life.

So I got done in Fl. what I wanted to do and now I am on to my next focus / focal point. And that is getting back into GraphQL along with porting the Mongo-db chat program components over to Material-ui and the latest versions of things. I need to make sure I continue to understand my focus.

Friday Feb 2, 2018

I am partially moving on to the next phase of my React and Material-ui journey. Next things to do is 1 thing on my continual list which is a better understanding of CSS and 2nd is to understand how the individual Material-ui components work.

Thursday Feb 1, 2018

After many weeks my create-react-app integrated into the AppDrawer with material-ui is working. The key breakthrough was my detailed understanding of react-router in combination

with a deep understanding of the mui doc components. I got this working in FLORIDA towards the end of my trip.

Friday Jan 19, 2018

I now have the example to fully understand react-router and they are located [here](#). Its the sidebar example that comes with the react-router examples. By tweaking it just a bit, I think I got it. The Links themselves will drive the router and the browser box will change as you navigate to the different links even though there are no routes it changes. When you add the routes you see things start to render. With this example I also understand how flex display works as I now have 4 columns up on the screen all working together.

Thursday Jan 18, 2018

Today we kicked off **reactlog18** which will be a superset of this log. It will show much more detail of projects having to do with React. I will outline here the higher level concepts as well. I am in the midst of better understanding react-router in the context of mui as well as integrating the AppDrawer concept in there too. Just these simple concepts alone is much more detailed and complicated than an innocent bystander could possibly imagine. Especially understanding the intricate details which I am attempting to do.

Fri Jan 12, 2018

We are up and running with AppWrapper, AppFrame and the Drawer code on create-react-app. We are now moving on to the react-router taking in an array of page links and creating a dynamic set of links that will model what I want to do with the current pages array in AppWrapper.

Wed Jan 10

Working on porting [AppDrawerNavItem](#) from Next to React Router. This is actually what I have been working on for the past week or so... It is a great project, and a really good way to dive deeper and come more up to speed on Material-ui.

In keeping with the beginning of 2018 and re-assessing where you are at. It should be noted that the first time material-ui is mentioned in your blog is the post on October 3, 2017. And today I went back into my github repos and noted as well that indeed October 3, 2017 is the day the semiotic repo was first cloned and built. So I got to material-ui via semiotic and D3 after having just completed the receipt project which was my first React project in concert with Redux. You will note that project was quite involved as well. So here I am more than 3 months into material-ui and by the time I get back from Florida it will be 4 full months working on material-ui pretty much exclusively.

Sunday January 7, 2018

Understanding concept of Context in React and how it works. This has taken a bit longer to figure out then it should have. Deep dive into Next.js to fully understand better how it works. Since Material-ui is so closely associated with it. It is important that I understand it better. Also, eventually to get all of this code running in create-react app I will need to understand Next.js first. This is apparent from the other days work where I was trying to port the material-ui doc module code over to create-react app when I hit a snag with this.props.url. I had no idea where this was coming from until I realized this morning that its returned by default in next.js. So here we go forward. For the record I started working with React around May 1, 2017. So its been about 7 months so far on this path in the woods :)

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We are starting 2018 out with a bang and continuing development in the React world. We are also starting out the 2018 worklog blog with a new way of blogging. All new blog posts will start at the top of the page instead of the bottom. Meaning 2016 blog posts and 2017 blog posts will stick around for now with 2018 but will be below all of this stuff...

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This is the 2016 worklog that I decided to leave here because it was such a short year. Note that 2016 was mainly about picking up in mid August after finishing up work at BuzzSumo.

I have decided to keep going in 2018 on this blog and just rename it worklog18, but keep my copy of worklog17 when the year ends.

## **2016**

### **August**

Tuesday August 16, 2016

Fired from BuzzSumo at 9AM. Henley called me and James was on the phone. It happened in 5 minutes, that was it.

Wednesday Aug 17

Day 1 of my new life and my new job. Focus today was ML. Will be one of the things I pursue besides search, Python and Golang.

Friday Aug 19

Start looking at Gensim.

Tuesday Aug 23

Up and running with Gensim.

Wednesday Aug 24

Jason is arriving this evening from Abq. Up and running with

Tensorflow. Not able to build it from scratch, but able to run all of the examples in the {contrib, example, python} directories. In the early afternoon I was pretty bummed out as I could not get it to build from src, but by the end of the day I was happy when I was able to run everything in the above 3 directories including the tests. So I am now pretty much all set with Python, all I have to do now is understand gensim and tensorflow better, write some code for practice and then move on to Golang. At that point, I should be able to start going out and talking to people about jobs and seeing what is available.

Thursday Aug 25

Took the day off and went to Newport with Jason and went for a boat ride out on the ocean.

Friday Aug 26

Started working on gonum and golearn which uses gonum. It wasn't a real productive day but it appears from first passing that golearn in particular is no longer being developed in a serious way meaning that the repo is basically dead. Will monitor closely over the next number of months and see what happens.

Saturday Aug 27

Taking a look at noms. Day 1 of noms is official, keep going.

Monday Aug 29

Day 2 of Noms and up and running on their Slack channel.

Wednesday Aug 31

Day 4 of Noms and I pretty much have the code base figured out. Today I reviewed how the data is being persisted to [goleveldb](#) in anticipation of possibly writing another backend store to Bolt. But in further review I decided not to. Leveldb is so clean, and the

transactions are covered magically in their code base. Where as Bolt requires some transaction management which would add complexity to the back end store. Today I also reviewed the final two Noms packages I had not yet covered including {dataset, types}. "*A dataset is nothing more than a named pointer into the DAG.*" Types is much more involved and the most interesting and complex part of the code base. Everything else is pretty straight forward. More notes on types but for now it looks like there are native types and user constructed types and that all types implement the Value Interface.

## **September**

Thursday September 01, 2016

Starting to look at Pulling data from a remote Db to a local Db and everything associated with that concept including writing a program to sync one db to another.

Thursday Sep 15

Lots of Go programming related to getting data into Es.

Friday Sep 16

Successfully storing go slices into Es using the Bulk Api.

## **October**

Tuesday October 04, 2016

Starting to talk to Noms with a Bolt ChunkStore.

Thursday Oct 06

Bolt is up and running

Friday Oct 07

Starting to work on talking to Noms with Redis.

Saturday Oct 08, 2016

Redis is up and running and talking to Noms. I am going on vacation, and will start working again upon my arrival in Pittsburgh.

Friday Oct 14

Arrived in the burgh where the plan is to work on and understand the type system. Upon return to Oregon we will continue to work on the bolt, redis back ends.

Saturday Oct 15

Got all of the big datasets up and running and synced to my local machine. Re-familiarized myself with all of the noms commands.

Sunday Oct 16, 2016

Noms hits the top of hackernews again today. My next step in the Noms front is to work both on better understanding hackernews along with **becoming an end user**. Meaning start building stuff and storing the data in noms. First application will be the golang doc tool, and see if that is a good fit. Also might look at the hackernews noms tool.

Monday Oct 17, 2016

In Ruby I used Nokogiri for scraping and parsing HTML. Now I need to find a way to do the same functionality in Golang.

Tuesday Oct 18, 2016

Start working on a way to get the number of github stars for golang importers of a particular package like redis.

Wednesday Oct 19

Up and running with [goquery](#). This looks really rock solid which



makes me very happy.

## November 2016

Wednesday November 02, 2016

Lots of progress was made while in Pittsburgh on numerous fronts. Still driving towards my first project of gostar. Got the whole angular side working today after one long day of effort yesterday. So we are back up and running with Angular. Also made an **executive decision** yesterday to stick with Angular 1 for now until there is a pressing reason to upgrade. I spent some time on Angular 2 which was released [48 days ago](#). Its not ready for prime time and there is just too much momentum behind Angular 1, so for now just stick with that.

Also, I got an email a few days back from Clara in China and she got me back into looking at the blockchain, decred and Ethereum. Note at this point in time I have been back from Pittsburgh for less than one week and its also the first mention of Ethereum.

Once the gostar project is done I might spend more time on Ethereum and possibly even Kubernetes because of this article on [Walmart](#). While back home I was firing on all cylinders and was incredibly productive on the Go front and now back home in Oregon we are continuing on that path with more work slated on the Angular side of the world.

Friday Nov 04

Last night at 3AM I discovered that raft, the concept of consensus is tightly related to the whole future work of the block chain. Also, the universe, with Clara as the catalyst and driver has gotten me naturally back into looking at the blockchain. It makes sense, you were heavily involved and invested in Noms but this

concept is actually real, up and running and viable from a business point of view. Also, spending more time on Angular is a must, as I need a UI. I always have and I always will and this time around Angular just feels more right and simple for me to understand especially now that I have the block explorer up and running and talking to Ethereum and after reviewing the source code of it, and seeing how simple it is, gives me the incentive and passion to pursue down a parallel path of both the UI and the back end.

Sunday Nov 06

Understand RLP encoding in the context of the rlp ruby gem.

Tuesday Nov 15, 2016

Hb came home today and I wrapped up the blockchain work for now and started looking into Kubernetes.

Thursday Nov 17

Start working on grabbing data from Hackernews in anticipation of storing this data in Noms, Elastic etc...

Friday Nov 18

Start looking at Hackernoms for the first time. It is actually mostly up and running.

Monday Nov 21

Starting to look at splore in the context of Hackernoms.

Wednesday Nov 23

I want to write Hackernews json files out to redis, leveldb, and bolt using the Hackernoms concurrency infrastructure. So first I need to get Redis and Bolt back ends working with Noms again. Then once this is mostly complete I can use the same basic

interface to write the json files to the 3 storage units.

## **December 2016**

Thursday December 01, 2016

Spoke to aa and rafael about chunkstore and batchstore. rafael asked me to help out with the concept of removing dependency on spec for adding new backend stores. I got the boltstore working with the noms {log, show} commands. This was a big breakthrough for me in general understanding of the spec and verifying the idea of using the dataset as the bolt bucket is going to work.

Wednesday Dec 07

The major focus the past couple of days has been to get the noms diff command working on bolt. The big problem has been that I was trying to open a bolt file a second time and it was locking. So I came to the conclusion that the easiest way to work with bolt is to "open, {read,write}, close". Yesterday I also found the spec tests which led me to a better understanding of where the localdatabase, batchstore, legacy term datastore etc. all works.

Chinese folks pinged me this morning that they were here and wanted to come down to Corvallis. I called Peter and he vehemently vetoed the idea. And the universe looked down on us and later in the day they got back to me and said they were not coming. I got lucky. Moving forward the only way I will work with them is if I am interacting with an English speaking programmer who is fluent in Chinese.

Saturday Dec 17

Hackernoms is up and running along with even part of the bolt

store working. This is great news ! Today I ported over the noms bolt and redis code to the latest and greatest version of noms housed in nomscs2 and then put that working code in hackernoms2.

Thursday December 29, 2016

Got bulk requests working with the underlying JSON string instead of using a doc. I am feeling pretty comfortable now with the Elastic Go client by olivere. Its a nice clean, well designed piece of code.

The year is finishing up on a good note.

**Plan of work**, It = Data                      2016/08/31

Go, Python

- Store It        {Noms}
- Search It     {ES, Bleve}
- Cache It      {Redis}
- ML It          {TensorFlow, GoLearn}
- Kubernetes {Deploy It}
- Blockchain {Secure It}

End 2016

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End 2016

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End 2016

**2017**

## January

Thursday January 05, 2017

Yesterday I got the Bulk processing working from the elastic json test data into Elastic. And today I started working on raft in the context of learning the whole channel thing better. I realized in the past couple of days that I really didn't understand channels and go routines well enough and I thought that this might assist me in that project. I will keep you posted.

Tuesday Jan 10

Day 2 of working back again on Ethereum in the context of learning go routines and channels better. I might be on to something with Ethereum. Eventually I will highlight my whole foray into the blockchain work, but for now its still in development.

Thursday Jan 12

Up and running on the Ethereum Swarm network. This is very good news as it serves as a great application (I think) of their P2P software. Also using gitter (for the first time) as this is where Ethereum does their talking. Some folks use Slack and some use gitter.

Wednesday Jan 18

Working on the p2p testing files to better understand the p2p network in ethereum. Yesterday I went up to Albany to the unemployment office.

Friday Jan 20

Lots more work to be done on P2P as far as understanding channels etc, but the big picture of how P2P is used in Ethereum

is pretty well understood. Its mainly only used in one place and that is in the **eth** package in a file called **peer.go** which basically calls **Send** on both blocks and transactions.

Monday Jan 23

Start looking at Nats after spending a few hours on nsq and realizing it still doesn't work great. I ran into the same errors back in November 2014 when I was still working for Spinnakr and coding up my and living in Ashland. Nats looks pretty cool and its another good example of communication which is related to the P2P genre of coding and also depicts go routines and channels.

Tuesday Jan 24

Spent the morning on go-datastructures and looking at queues. I spent the whole rest of the day doing my couple times a year massive cleanup of my github accounts. I really did a super job purging, moving things around and creating this [file](#).

Tuesday Jan 31

Completed for now understanding p2p-1128 which is a standalone p2p testing framework by zelig. I am now going back up the stack into **whisper** to better comprehend protocols and peers.

## February

Wednesday February 01, 2017

First time going to the Death Cafe ! Also, first full day looking at Whisper which looks really nice and is definitely another great topic to better understand the Eth Framework.

Sunday 05

We are now exploring the bootnode, and running multiple geths

on the same machine attaching to the boot node. In my opinion we are making great progress in the ethererum world peeling off more layers of the onion from the bottom up. The P2P layer and everything that touches it is the bottom of the stack and that is where I have been spending all of my time to date in the eth world.

Friday Feb 10

So it was a good week working on Ethereum. Today is my last day of work prior to taking a week off and going down to Ashland and Chico. I ended the week on an extremely good note understanding solidity and smart contracts. I am just getting started in this area but it will drive me to my first job. This is the final shoe to drop so to speak. Once I get this down I can go out and get a job working on Ethereum. This stuff is very cool and I am excited to move forward in this area.

Monday Feb 20

Eve's birthday and more work on solidity contracts and starting to understand how to send in Transactions.

Tuesday Feb 21

Lots of work on getting contracts to work, at the end of the day I found [Ethereumjs Testrpc](#) which looks to be very interesting and was the magic that got the truffle tutorial to work. After spending all day to try and get it to work with geth. At the end of the day I fired up Testrpc and everything fell into place.

Thursday Feb 23

Day 1 webpack understanding in concert with Truffle. Prior to today I had NEVER looked at or heard of webpack.

Friday Feb 24, 2017

Much deeper dive into Truffle, starting to look at all of the individual repos in concert with automatic download of them all via [trufflesuite download](#). This is my first major DEEP DIVE back into Javascript. In fact this is the first reference of Javascript in this worklog file. All of 2016 was spent either in Henley land messing around with Ruby and or Golang afterwards. It was the need to be able to deal with, compile, and deploy contracts to Ethererum which got me back into the Nodejs, Javascript game. And so today I dove back into callbacks, promises etc....

## **March**

Thursday Mar 02, 2017

So I am cranking along on the Solidity contracts, searching for examples that make the most sense for me to master and discovered the 3 examples on the Ethereum website. So now I am going to use those to implement them in Truffle and write my unit tests which should give me the confidence to move forward on being an "expert" in Solidity contracts with something that is relevant to what I am doing.

I spent most the day cruising around looking at [Dapps](#) and found out that I just needed to focus on the core Solidity code that will get me up to speed on what I need to know along with the Truffle Testing framework to make sure I understand how to do the testing correctly of the contracts. Being able to really hit and test the contracts hard is mission critical to what I will be doing moving forward in the contract space.

Wednesday March 08

Beginning of the week was all about a deep dive into Web3.js and Testrpc. Lots more work to to on Testrpc but at least I have a decent handle on what Web3.js is all about. Now I am back into



cranking out more working Truffle contracts and if need be, will look into Testrpc and Web3 to help debug getting running examples delivered to Github.

Thursday March 09

Going back and re-reading the complete Solidity documentation set from the top now that I have a better handle on what is going on. I did this with Truffle recently and it all made more sense to me the second time I read it. I also got the Solidity docs now on one HTML page and one PDF document which makes it easier to read and review. Will use the examples in the doc to drive all of my Truffle examples for now. Once this is done and I complete the testrpc and web3.js stuff I should be in really good shape and could actually possibly get back into doing some Go coding again. At that point I will be ready to look for a new job.

Thursday March 16

Huge progress on Truffle and reading through the solidity docs including writing contracts having to do with Structs, Arrays, and Mappings. Based on completion of this work I am now ready to go out and start looking for a job in the area of working in Ethereum in coincidence with the Ether price going from 10 to 40 in the past 2 weeks. We live in interesting times.

Friday March 17

Day 1 of looking for a job on Angelist. Also looking for work as a CTO as well as a software developer. This is my least favorite fun part of my professional life, but something that needs to be done. I will also continue to flush out and get better at the Solidity contracts in concert with Testrpc and Truffle.

**Spring 2017**

Tuesday March 21

Completed initial work on understanding the solidity iterable mapping, having worked on it over the weekend. Long talks with Dotun and Alex on Skype re: **Ownage**. First cut at looking at the Opcodes for the Ethereum VM in the context of better understanding Peter Borah's ether-router code and his inline assembly calls.

Wednesday March 22

Day 2 of talking to people about work etc. Be patient on this job search and craft a path that makes sense to you. There is no hurry to take the first job that comes along unless it makes sense to you and feels right. For example, after reading through Deepak Rao from Pivotchain's About Us/You website blurb I decided to not even talk to him until I get back from Nashville. Also, had the final 3rd talk with Jack du Rose, it went well. He is an interesting guy as well. So now I have spoken with all 3 of the 4 co-founders.

Thursday March 23

Another round of speaking with Dotun from Ownage this time with a more technical bent to it. I reviewed Swagger / the Open API spec for the first time and that was the fuel from which I started my diatribe and speech about my technical knowledge. We continue to live in interesting times.

Sunday March 26

Tomorrow we go to Portland and Tuesday we go to Nashville. I am in pretty good shape all around for looking for a job. Solidity contracts round one are in good shape. Yesterday, I dove into Gnosis and realized its not yet ready for prime time. Lots of interdependencies and compilation issues with include files, it took me several hours to evaluate and give it a NO for now. But it was

an interesting experience in looking at bigger projects surrounding contracts. Probably lots of useful info in there. So now we kick back go on vacation, and come back ready to talk to more companies after doing a first round with Ownage as the basis for thinking once again about looking for work and a path forward with my new venture. I will update here with my thoughts from Nashville and what I am working on there in preparation for another round of talking to folks after my return. Continue to do your meditation, stay calm, and realize how lucky and fortunate you are to be in this position.

Connected with Nick Johnson of the Ethereum Foundation regarding his interest in possibly using Noms for Geth.

Monday March 27

So I was curious to know how long it took to learn Solidity contracts and basically it took from the time we were in Chico till now which is approximately six weeks. And with this knowledge I can go out and start talking to people about work, but at the same time I can now circle back with a complete picture and move forward in areas that make sense for better understanding. I am off to Nashville, the next note will be from there and a path forward.

Thursday March 30

Arrived in Nashville, its a very cool town. Got an email from Dotun this morning at Ownage, looks like I have a green light. Had I not heard back from Ownage I was going to spend my time in Nashville looking into the Noms NBS code base so I could report back to Nick Johnson, but instead I am going to come up to speed on Node in concert with Redis and Express.

**Transitioning COMPLETELY away from anything having to do with the [blockchain](#).**

*From here forward, and starting full speed in May its all about React and its subsidiaries. You can ignore the rant about why Javascript is not good. Because starting with my React work its clearly all I will be doing.*  
*Edited on August 30, 2017*

## April

Saturday April 01

Sharon's Bday ! So as noted in the previous post I am starting to get into Javascript. As with Bitcoin and Ethereum and my interaction with the chinese folks, ownage and dotun specifically is getting me into Javascript and the place to look for cool projects is the P2P IPFS projects. Also motivated by a talk yesterday with David Mondrus of Orbit.mn. Noms is missing the P2P aspect, but probably not for long. Started looking at IPFS.

Back home from Nashville on Tuesday evening April 11, 2017

Insight to **drop Javascript as a language** for me going forward.

Thursday April 13

Early morning talk with Dotun and Jack at Ownage. Spent the rest of the day looking at the Javascript version of libp2p and at the end of the day started looking at the go version of libp2p and am literally stunned at the ease of programming in Go compared to the FUCKING UGLY callback hell that Javascript has to offer. It is just pathetically overly complicated, and for me a SHOW stopper. I need to be able to read and understand the JS but actually having to write JS code professionally is not that appealing. Its just not worth the callback BS you have to deal with. In the past number of weeks I got away from JS by diving into the contract stuff, which is reasonable and then for the past 2 weeks in Nashville exclusively looking at JS code and being stumped by hard it is, and then tonight looking at the Go code

again after being away from it for awhile and going this is so much cleaner and easier to understand and write.

I am glad I spent the past couple of weeks programming and looking at the JS code prior to possibly accepting a job with Ownage and I believe the fact that I didn't get the offer letter today because of the time difference and then spending all day on the JS code and at the end of the day looking at the go code gave me a respite from possibly making the wrong decision. As well as my gut has continued to tell me that its not the right job, despite the fact that these guys seem pretty cool is a good sign not to go with it.

This possibly reopens the idea of taking another look at the Noms code as well as the libp2p code on the Go side of the world.

[And this should be another hint](#)

The fact that the Noms folks completely dropped their Javascript version of Noms after more than a year of work on it says alot. Here are some very bright programmers, who used to work at Google, who are productive Go programmers saying its just not worth it. For me, its an executive decision. For me, I was lucky to go down the path of Javascript for 2 weeks in Nashville and just cut my losses and move on.

And it all came to me this evening, when I went back to look at the Go code and saw that its just a cleaner simpler language. However, I did learn that being able to read and understand Javascript is very important, its just not the language of choice for writing professional code. Period, end of story. AND going forward long term, why not make the decision now, be confident with it, and move on...

Wednesday April 19

And then there was [this post today](#) on Hacker News

So the above note from a week ago was confirmed with a very long conversation with Rafael from Attic Labs. I have documented our conversation where he reconfirms for numerous reasons why Node.js is NOT a good language for building databases.

This week I am back into coding redishacker where I am getting back up and running the reading of the hacker news API and cacheing the data in Redis and writing that data from Redis to Elastic.

Friday April 21, 2017

Helped David Mondrus with the Trive paper on Swarm and P2P. Also starting to get up and running yesterday with an understanding of the Hashicorp software stack.

Tuesday April 25, 2017

Back into massive programming in Golang with a focus on getting a job programming in Go.

Thursday April 27, 2017

My final cover letter (for now) looks good. I am going to start sending out at least five resumes per day (or more). I am starting to get "serious" about looking for a job. Coming more up to speed on Golang channels and goroutines in the context of moving data from Hn to Redis to Elastic. I am so/so about finding a job doing blockchain work. I am just not sure its the call for me, similar to doing work with financial markets. For some reason the whole money field is just not that appealing to

me. But I wouldn't rule it out either.

Friday April 28, 2017

"after much ado about nothing" I am finally moving data from hackernews to redis /// and then from redis into elastic. I finally have channels and goroutines marginally figured out and my redishacker and elastichacker repos are up and running. This is actually a fairly HUGE step and gives me more confidence moving forward with my Golang coding abilities. Keep on coding in Golang, don't stop and keep on coming up with problems and projects that keep you cranking out code which is what I need to do.

**First mention of the word graph and react in my work log.**

Monday May 1, 2017

Work all day on GraphQL. So the question is this... Initially how did I come to look at GraphQL; and I think the answer is Noms. This is really the initial motivation that got me to look into Noms.

Tuesday May 2, 2017

I am now back into looking at Javascript from a front end point of view only, and not back end work like Dotun was attempting to do at Ownage. So the main driver behind this for now would be React and possibly in the future D3 once again. I remember starting to look at D3 back when I was at Caltech ? After more research I noted that it was [Protovis](#), initially released in April 2009, that I got into while I was at Caltech. [D3](#) was released in February 2011 at the tail end of my tenure in Buenos Aires. Any way, also spent some time looking at a better understanding of webpack and got yarn up and running for the first time. It is a replacement for npm from FB.

Wednesday May 3, 2017

Spend more time applying for jobs from Hackernews and write up another cover letter this time targetting API development with GraphQL.

Friday May 5, 2017

Installed dgraph along with the companion RocksDb, which was a bit of an effort. Will update over the coming days with progress in this area. Got cayley up and running as well.

Saturday May 6, 2017

Big breakthrough last evening in the understanding that the [RDF](#) framework is closely related to Prolog and ML in general. Besides the fact that it is related to GraphQL too. So there and some really big wins with a better understanding of graph databases. In the past I have looked at graph databases and not "gotten it". Now I get it, and with both cayley and dgraph both out there now, and an ecosystem surrounding both of them on slack it might be the next big wave of research for Arcadian Group.

Monday May 8, 2017

We are now understanding the key point behind protocol buffers, especially in the context of dgraph, which uses them heavily. I think I am finally starting to understand why they are so cool and important. It gives you a way to generate out code very quickly, for things that have to do with data and methods that are called by grpc.

Tuesday May 9, 2017

The doc in dgraph is good and explains things well including PostingLists which are an important part of dgraph.

Wednesday May 10, 2017



So I was pretty bummed out yesterday about my job search thing as I realized everyone wants to give you a test and had some email interactions with folks who wanted me to work for them for free meaning equity. Then today I discovered the keyword DEVOPS and now I have a better handle on new jobs to look for on hackernews.

Thursday May 11, 2017

I had my first Slack conversation with Manish R Jain, Founder and CEO of dgraph labs. He told me that soon he will be coming out with a new k/v db that will replace Rocksdb. Our conversation started out because I noticed that the license on the files in rdb was wrong as it was copied over from tecbot's gorocksdb.

Friday May 12, 2017

Spent all day running queries in the dgraph UI against the 21 million data set in benchmarks.

Sunday May 14, 2017

Hackernews home run. Did this [post on the Dgraph Badger](#). It is my first ever big time post on Hackernews.

Monday May 15, 2017

Starting to understand how to query Predicates and schemas in dgraph.

Friday May 19, 2017

Got to a good place with dgraph in understanding Postinglists. See more details in the Slack May dgraph archive.

Monday May 22, 2017

After a nice talk yesterday with Mohsen Hejrati from Tensorport I did a write up today on [Distributed File Systems](#) including Fuse and GoFuse. It

was interesting to note that Ethereum Swarm uses [Fuse bindings for Go](#).

Friday May 26

Starting working on Redux in the context of React and the Dgraph dashboard and other UI components. The dashboard uses react and redux and so this is the logical place to start into UI development. Its actually fairly easy, as I have done lots of this stuff in the past, and I have a problem to work on which is kind of cool.

Wednesday May 31

Huge push into React and the whole Fb ecosystem including Todo, Immutable.js, Relay...

## **June**

Friday June 2

Completed working on understanding my repo immutable-todo, and now moving on to the details of graphql including graphiql. Stay tuned for more updates on this topic soon.

Sunday June 4

Spent all day working on Relay and by the end of the day I got the general concept of what it is doing. This is good news, as for now I think I can move on from it and use it in real products for customers if its needed. At least now I understand what its good for and how can be used in future projects.

Thursday June 8

Getting in to the graphql-js tests and how they work. Then once that was up and running realized it would be cool to roll your own schema now that you understand the Star Wars Test. So I

started in a BIG way getting into the Github Schema. Their doc is good and their explorer is good too. So I got lots of work to do here, but I am up and running with it.

Saturday June 10

swapi-graphql is a great example of building a graphql server and so I am examining the details of this implementation. This will allow me to better understand how to build graphql servers with new schema systems. We are making really nice progress on this whole graphql ecosystem.

Wednesday June 14

Feel real comfortable with my understanding of graphql schemas, source code, ready to launch back into github and start building out the schema in javascript.

Thursday June 15

Day 1 of building out the github schema in Javascript. Went over to Mushroom's house and set up his new iMac. He gave me a painting in return which I will pick out at a future date.

## **Summer 2017**

Wednesday June 21

Start coding up the github schema with topics. Actually put a small dent in getting this started. Was on vacation the past few days down in Florence, OR visiting with Jim Sigman, Susie, and their children {Scott, and Sam}.

Thursday June 22

The Node interface is up and running and is being used by Topic. I got the uriType working today. My plan is paying off as I am starting to understand how all of this stuff fits together. This is

probably one of the most productive days of coding I have had in quite awhile. You have to get all of the balls in the air and then keep going. I am several days away from really starting to look for a job in this exact space. Which is coding up new graphql servers in Javascript.

Friday June 23

Spent all day sending out resumes. At the end of the day I realized that I was not going about this the correct way. You need to understand who is doing real work in GraphQL and pursue these companies. See the doc in this folder called **GraphQL Lead Strategy**.

Monday June 26

So I made good progress today getting Repository, RepositoryOwner etc. up and running. Tomorrow I will start working on automating getting data from Github that will then be stored and compared against my local queries.

Wednesday June 28

Interview at Alyrica networks. I spoke to its CEO. It was a good experience, they use UBNT equipment which I learned subsequently when I saw the service guy the next day across the street.

Thursday June 29

Starting to look at Relay for a 2nd time in the context of bridging React and GraphQL together now that I understand GraphQL much better having forayed into the whole Github Schema.

***This is where I start really working on React full time having completed my initial understanding and foray into Dgraph and GraphQL. This is the first mention of [reactabular](#).***

## July

Wednesday July 5

Starting to understand React better. I have got the tables and layout working together and stored under the repo **tabulartwo**.

Thursday July 6

Now that Reactabular is working in the most basic way, I am diving more deeply into dealing with what the data is going to look like. Starting out by looking at the package table-resolver to see if it can be used to deal with the data that will be coming back from different applications that will use this React component. I think investing time into this "particular" react table ecosystem is worthwhile as the concept of tables are used everywhere in UI building systems.

Tuesday July 11

I just a had a four day vacation, so getting back to work today had a slow start. Yesterday we got new internet cable infrastructure so NO work got done. Today I launched back into REACT full hog. If I keep up this focus I should be in pretty good shape in short order.

Wednesday July 12

Interview at Block 15 with Joseph Sullivan and Jonathan Woo from Active 911 owned by Alyrica Networks and Joseph's brother Kevin.

Thursday July 13

Day 1 working on the react-hn. This is my first BIG React application and it will show me in more detail how to put the bigger pieces together.

Friday July 14

The major pieces of react-hn are falling into place nicely. Today was spent understanding local, session storage and how the code uses it for persistence. Got my last paycheck from Unemployment. I got 26 weeks of money. First time in my life I exhausted my benefit.

Friday July 21

Huge week of React. Got bluerock1 up and running. In other words I am now able to pull the data from the Hn Api and stuff it into a Table. At the end of the week I realized I need to spend mucho tiempo trabando de CSS. So I spent all of today starting to look into the [jxnblk](#) ecosystem along with the corrolary [styled components](#). If I can get the CSS and the styling correct I will be in pretty good shape. Keep on going and staying focused.

**CSS** is now a **HIGH Priority** in my general understanding...

Monday July 24

Starting to look into better understanding CSS via my first cut at the jxnblk ecosystem.

Wed July 26

[Styled Notes](#) is in a good place and I am starting to get a handle on the whole Flex / Box paradigm in the context of styled components.

Friday July 28

Fully engaged in the React ecosystem and today was a huge day in understanding the purpose of Redux in relationship to Redis on the server side. This was in the context of the Hnapi that uses Express with Redis as the cache. These 2 topics are orthogonal and I didn't realize how these pieces really fit together to now.

Also was exposed to [connect redis](#). When I first looked at it I did not understand why this was important. But as I further pondered, think of millions of clients out there hanging off a set of web servers. In the react world each has a different state system in their Redux. That is not related in any way to Redis. I was trying to store that state in Redis which makes no sense. The idea would be to think about which parameters you want their session to store, think banking application or trading application but not store the entire state which is what Redux does. So all of these ideas are coming into my head and I am starting to appreciate why Node.js / Express is such an important concept to be an expert in / with the relationship to know where Redis fits into the picture and where Redux fits into the picture.

Wednesday Aug 2

Heavily into Redux and its source code. I am debugging some Redux apps and have the redux and react-redux src code in my code base starting to mess with the underlying src code of redux to figure out why my combine-reducers is not working properly. Lots more work to do in this area.

Sunday August 6

Completely re-read the redux docs again and this time I think it is starting to sink in along with understanding static propTypes when defining a new Component. Its amazing how this stuff is so subtle and it wasn't obvious to me that those are the parameters / properties that get passed into the React component. In either case I am feeling better about all of this stuff.

Monday August 7

I "think" I finally got React and Redux. I launched into the whole React ecosystem initially around May 1, but diverged in the GraphQL / Dgraph ecosystem and then got back into React around

the very end of June / early July. So its been about 5 - 6 weeks of full time study of React.

Wednesday August 09

Starting to work on shopping cart redux example. Part I was to eject the code from create-react-app which is the standard for most off the shelf examples in redux and react and then move forward with the server.js / express way.

Thursday August 10

All day on getting a "Remove Button" to work on the out of the box Redux Shopping cart example. Good progress on this, and realized in the early evening that I had to pass in my removeFromCart function PropTypes function because I was passing it into CartItem and it had to be passing into the CartContainer. Seeing this is the WHOLE reason why I am doing all of this work. There is no other way to figure this stuff out then do the work. I like UI development because it is fairly easy and you can do some cool stuff with it. And there is just so much demand for people who have these skills compared to doing back end development work.

Friday August 11

So I finished the shopping-cart-remove repo which is the redux shopping cart example with my additional remove button. this was a very nice little short, and sweet project. It was my first "major" redux project, and should be a nice starting point for getting into the next phase which will be dealing with possibly reactabular.

Monday August 15

Committed code to redux/examples/shopping-cart to add remove button to code. Start working on the tests which failed when I



did the commit. I forgot to deal with the tests, and its the first time looking at how to test react code. So that is my next thing to learn and do.

Wednesday August 16

So I came up to speed on the [Enzyme](#) testing framework in relationship to my work with the shopping-cart example in redux. They use Enzyme as their testing infrastructure which appears to be very nice.

Wednesday August 30

Mom and Dad are leaving today. I got some good work done while they were here. I finally wrapped up round one of the [reactabular-shopping-cart](#). The key work was getting the state correctly injected into reactabular and understanding how to do that. Now that its completed, I can move on to the whole shopping cart / table ecosystem of saving data to redis and mongodb, a front end inventory control system, and a back end receipt system showing the receipts from each checkout. In other words a complete store. And this will enable other table driven concepts like buying and selling financial instruments and keeping track of the orders, and showing monthly statements etc. This is simple minded stuff, but great infrastructure code to better acquaint yourself with all of the issues surrounding redux, reactabular, mongodb, redis, react.

### **Core Competencies and Core Focus Groups**

as of September 1, 2017

React

Redux

Reactabular

Redis

Mongodb

Monday September 4 Labor Day

Just did a nice walk along the RR tracks to Herbert.

So now that phase I of the shopping cart is complete I decided to spend a few days looking at Passport apps which I did. That is in a good place, along with the simple process of talking to Mongo as well via Mongoose. I am now ready to continue on my development path but also to **move ahead on looking for a job.**

So here we go with a big push to find the right job. I am ready. I have been "in school" for the past year and passed all of the courses, done the homework, and passed all of the tests. We are now officially ready to get to work. The only thing standing in your way is "finding the right job". Quickly filter out stuff that isn't right and only go with stuff that is in your heart and feels right.

Thursday Sep 7

Got lodash up and running in the es6 environment and then used **omit** to modify "removing" items from the cart. This enabled the tests to start working as well. So this is actually a fairly big step forward as I now have access to all of the **lodash** functionality inside my redux.

Friday Sep 8

Start working on getting the receipt up and running in Redux.

Sunday Sep 10

A very minimal first cut of receipt is up and running on Sunday morning.

Thursday Sep 14

Talk with Alex @ Brainbot could have possibly redirected my efforts "**once again**" towards crypto. Take a relook at Testrpc and Truffle into whether your concepts are feasible.

Friday Sep 15

After a HUGE slog through the woods **Receipts** is finally starting to work. All of the tests are passing and I am displaying receipt data in the browser in a Reactabular table. It turned out to be a VERY long week, but success arrived just in time on Friday afternoon.

Spoke to Habib Moody at [Literably](#). Might follow up in a few months once he hires his FIRST engineer.

Tuesday September 19

Spoke to Fabio from Tesorio, he grew up in Albuquerque and went to the Academy.

Wednesday September 20

It took me about 20 days to fully get receipt up and running. But at around 4PM today I finished this project. I basically started working on this project on August 9; and last night I had a big breakthrough on how the flow of redux works. The event fires and updates the state tree and you connect the change in the state tree of redux to your react components. And in summary, it took me months to digest and get this very simple point. But last night I think I finally got it and understand. And that led to the conclusion of my receipt project today.

Thursday Sep 21

Deployed receipt to gh-pages via create-react-script which is very cool. Also got my Marionette Backbone Jobs repo back up and

running on stormasm.

Friday Sep 22, 2017

Begin working on d3 project and coming back up to speed on d3. Back on May 2 when I initially launched into this whole React ecosystem you will note from my log that my whole intention initially was to possibly work on d3 as well. And here we are almost 5 months later having completed the initial groundwork with React and so part two in this whole react roll out is to look at d3 and possibly other graph visualization libraries. Now that the receipt work is done, it was a moment to ponder and choose my next step and part of me once again considered the whole ethereum world with truffle, but for now, unless I get hired by someone doing crypto I am going to move forward with graphs and data visualization.

Wed Sep 27

So I got the concept of a menu up and running using pure.css. React Router is well understood now as well. When I upgraded react-redux-d3 from the old code to the new I needed to learn about react-router as they changed the way the code worked in V4. So I blended react-router with pure menus in my new aspen release. Also, I understand the concept of a Navbar and what it is in the concept of the refresh button which must stay at the top even as the D3 graphs scroll down the page forever. The Navbar concept is pretty cool. Yet another reason to be up to speed on how CSS works, as it is a mission critical piece of the "front end" puzzle.

Tuesday Oct 3, 2017

So we are now on to my first D3 framework which is called Semiotic. Its a good one and the author is good too. He wrote a book on D3, he works at Netflix and his code is good. And I

discovered yesterday he is using Material Design React components for the CSS layer. Very cool. I like the menu folding concept, it just feels right to me. So moving forward the CSS design concept along with D3 as the application is a good combination. Move forward with data visualization, React, D3 and CSS. Do not do Python for now. That is on the back burner until after you land your first job doing front end development, unless someone wants to hire me to write Python code. Also, spoke to Habib Moody yesterday from Literably. I told him I wanted a job and not to be a one off worker for his pet project of statistics on his data in a 50 table Postgresql db getting it via Python.

Wednesday October 11

So we are hard at work on understanding Semiotic. Both as an end user and as a developer. On the developer side of the world I am now in good shape with understanding how everything is Frame and that XY, OR, and Network all return a Frame so when you look at the HTML you simply see a frame. Today I started getting into the individual D3 packages that are used by semiotic. This is a HUGE ball of wax and one that will take months to truly understand. So don't get too defocused on D3 in and of itself but be slightly more general with React and then have D3 as a speciality. So I guess that is true for all of the data visualization field.

Thursday October 12

Starting down the uber road of react-vis and their whole testing framework of their react components.

Sunday October 29

So we are getting ready to leave for Ashland and I wanted to do a quick update prior to leaving. So I have spent the past several weeks coming up to speed on the docs folder of material-ui which

will be one of my core platforms going forward upon which to build nice new websites that can be deployed to gh-pages. The architecture is very clean, simple and easy to understand and is based on [Next.js](#) and [JSS](#). My strategy to date has been to use D3 as my application layer upon which to develop an underlying core infrastructure initially based on the Semiotic custom framework but once I discovered that Semiotic was using Material-ui and that Material-ui was using Next.js it just all came together. So the next step from here is fairly obvious. Continue to get better at understanding both D3 and the CSS framework JSS and how it integrates all sorts of different D3 Css concepts inside the stylized component hierarchy.

Friday November 17, 2017

So for the past couple of weeks I have been working on react-vis and coming more up to speed on d3. Yesterday I discovered vx after going through the code of all of the the react d3 repos [in my list](#). It took me awhile to get here to understand what is going on; and it took me looking deeply into d3 and what the frameworks are actually providing. Vx appears to be the most low level framework plus it is written by a guy who knows what he is doing as he wrote the Javascript guide at Airbnb. I have come to the conclusion that semiotic is too much and too complicated from a code point of view. Vx seems to be at the right level of complexity and is close to the SVG spec and the D3 Api. So over the past 2 weeks in Ashland I have honed a bit more my skill set with D3 and continued to put more emphasis in getting better at D3 development in concert with its integration into React.

**This is where I finish up the understanding of material-ui and start building things for it using graphql as the query language to get interesting data and put something into a website.**

Monday December 11, 2017

So I recently made 2 commits to material-ui which is kind of cool. I am up to speed on material-ui. I feel good about it. The next step is a conscious fork in the road. I could either dive deeper into material-ui or I could take all of my knowledge and start to build something. Something real, something that is kind of interesting and will leverage my react / d3 skillset to show something that I am interested in. My first foray into this will be taking another look at graphql.

Wed Dec 13, 2017

Started working on parsing markdown with the goal of grabbing a bunch of github links from awesome github repos Readme.md files.

Thursday Dec 14, 2017

Continue on the Markdown parsing strategy. Found Markdown-it, and I will use this code to drive myself forward. Yesterday I took a look at marked first and then found markdown-it at the end of the day and it is further along, in continual development and is much more clearly documented on how it works. Stay tuned.

Tuesday Dec 19, 2017

It will be a week by the time Markdown is in good shape, but I am not yet completed building out the link filter. I am making better progress now.

Monday Dec 25, 2017

Markdown is in good shape almost. I now have all of the github repos from the original markdown file and have regexed out all the stuff I do not want. It took less than 2 weeks to get here. So the markdown tangent was not in vain and did not waste too much time.

Tuesday Dec 26

The Markdown project is done and I now have all of the github repo urls I want for now.

Wednesday Dec 27, 2017

First time ever using [code sandbox](#). Very nice for short demos and debugging and isolating issues.

Friday Dec 29

Figured out the forking model in codesandbox. Also, got all of the mui-demos in one github repo. Very cool. No longer need to haul around all of the other crap associated with running the demo.

Sunday Dec 31, 2017

The final day of the year was looking into porting the core drawer code in mui into my own custom version.





