Brian Jemilo II
114 W Ash St
Watseka, IL 60970
(708) 381-9854

http://jemiloii.com
http://github.com/jemiloii
http://linkedin/in/jemiloii
jemiloii@gmail.com

Note: Primarily interested in, but not limited to, working remotely with Node.js, Angular, and any ML work.

From the day I crafted my first computer, I dove into web programming with a simple curiosity to understand how it all works. My dive began with HTML and CSS, then swimming through the Flash and XML era. I became passionate, ripping out maps from the Google API, and adventuring to the depths of the LAMP stacks, to the ocean of JavaScript, and returning home with bounties of gems from Ruby on Rails isles.

My simple thirst for knowledge and development became fueled by dreams of mine and others like yours. Even though our seas are swarming with problems, they will only begin our hunt for the treasures lying within our dreams. So whether you're part of a massive interactive fleet or just setting sail with a single ship, bring me on board to navigate your dreams, mapping out all the possibilities. Through collaboration and diligence, we'll bring value as we sail the seas of code, and no matter the adversities, we'll develop and make your dreams, our dreams, a reality.

My name is Brian Jemilo II, and I'm ready to undock to set sail with SPAs and Node.js containers! Recently I battled some mongoose, and it left me on a Redis trail, learning that geolocation is pretty simple. So pigeon me some mail and tell me about our dreams! Are you ready for an adventure Mate?

Web Development

I'm a full-stack web developer with knowledge of related technologies, including:
Node.js, Express.js, Angular, Angular.js, Python, Docker, Kafka, StableDiffusion, HuggingFace Diffusers, Vue.js, Nuxt.js, React, Next.js, Machine Learning, Karma, Sails.js, Ramda.js, MySQL, MongoDB, Greenplum, PostgreSQL, Can.js, Socket.io, uWebsockets.js, PIL, torch, WebRTC, Twilio, SMS, HTML5, CSS3, HTML5 Canvas, Vanilla Javascript, Jquery, Parsley.js, Twilio, Linux, Nginx, Apache, PHP, Ruby, Ruby on Rails, Wordpress, Joomla, Redis, Create.js / Easel.js, Phaser.js, Git, Github, SSH, Vim, DNS Zone Records, Cloudflare, Website Load Optimization, Custom Solutions, MVC, MVVM, Less, Handlebars, Ejs, Data Binding, lodash.js, bower, Primus.io, GoogleAPIs, Mocha.js, D3.js, and most likely a handful of technology I know am forgetting to mention.

Talks / Presentations

I gave many in-house presentations and talks, but most were work-related, or I was showcasing a new technology or architecture using our existing codebase.

Introduction to Stable Diffusion
Presented this talk online on an Engineering discord that I am a member of. Had about 90 people in attendance, and many were quite excited to learn how they could program their own image-generating AI from scratch.

Game Dev Concepts with Phaser.js
Presented this talk at Conversant Media and covered the high-level programming concepts of programming web games. Covering topics from the game loop, handling states, sprites, and even animations. I also gave a light intro to using Phaser.js to create a game.

The latest with ES6
Presented an in-house talk at Conversant, discussing the many benefits of upgrading to using ES6 and how to use many of the latest features. I also discussed the node.js roadmap of when they plan on fully implementing the many features.

Soaring with Bluebird
Presented this talk at Conversant and highlighted many interesting features that are often overlooked in Bluebird. I also covered various performance benefits and gains with the different methods. I finally discussed Promise anti-patterns and how to avoid them.

Chicago Javascript - Sails.js Demo
Presented this talk at Enova in Chicago. I presented a demo of the Node.js framework called Sails.js, a robust, production-ready Node.js framework for building websites, APIs, and real-time applications.

Chicago Node.js - Sails.js Demo
Chicago Node.js is a development community meetup hosted by Groupon under Sean Massa. I presented a demo of the Node.js framework called Sails.js, a robust, production-ready Node.js framework for building websites, APIs, and real-time applications.

Note
I gave more presentations than this, I just never really kept track of them. I even did an on-the-fly express routing presentation in San Francisco. I was looking for a meetup when I was out attending Forward.js and ended up applying to join and getting accepted into an all-women's meetup. I just saw javascript and signed up. Once I showed up, I was expected to give a presentation. Not surprisingly, I was ready with an exciting presentation on Node.js and utilizing features with express.js to create better and more maintainable code.

Meetups I've Attended

Chicago Node.js, CanJS Chicago, Geekfest, Chicago Backbone JS, Chicago Ember.js. Chicago HTML5, OpenHack Chicago, Chicago Angular

Internships

Birdfeud, Chicago IL   Oct - Dec 2013
Focus: PHP, PhoneGap, Mobile

  Startup Institute partner project. Through this project, I've learned how to create program concept flows, develop with PhoneGap, Facebook Login API, and Google Maps API for mobile phones.

MacMillan IT Group, Tinley Park IL   July - Oct 2009
Focus: PHP, WordPress, Joomla

  Worked with the startup to help develop WordPress and Joomla websites and to bring in local businesses.

Education

The majority of my education is self-learned from researching, reading, attending meetups, events, hackathons, mentoring, and applying the knowledge that I've gained. Learning web development began for me when I was 10 years old. I've recently built my first computer and went to work learning how to build websites for a gaming group I founded. I attended Devry back in 09 for two semesters to learn that I could save money and learn the required skills faster than the institution would provide. Through my years of freelancing, I attended Startup Institute, primarily to learn about startups. As they provided 4 tracks, sales, marketing, frontend design, and rails development. I took the web development course in October 2013 in the web development track. I focused on Ruby on Rails, Git, Heroku, Amazon S3, Parley.js, and Google API. My education is neverending, as I currently pursue and learn about the latest web technologies. After seeing Rails, I ended up finding similar technologies and made a switch to node.js, teaching myself. I've also had formal Angular 5.x training provided by my company. Our client-side application is now a hybrid Angular/Angular.js code base.

Work

Health iPass/ Sphere Commerce - *Lead Software Engineer - Oct 2020 - Current*
This is a Healthcare / Fintech full-stack lead role. Responsible for a team mixed with junior to senior-level engineers and QA. Responsible for leading the team on the many patient and client-facing apps we developed and maintained. Took one of our hardly used applications, the patient portals, and lead a refactor and redesign of it. It was welcomed with massive success and is the most used app today. I've been a bit of an intrapreneur here and have taken responsibility for all the web-based patient-facing applications and the administration portion of our client portal. Guiding developers and helping them grow is a lot of fun. While here, I mentored a developer who had poor performance when I joined. I guided them through a mix of technical skills and mental habits into becoming a solid, confident, and reliable member of the team. Here I've primarily worked with Angular, Node.js, MySQL, and a bit of Python and AWS.

Vokal Media - *Software Engineer - Oct 2019 - Oct 2020*
This was quite an exciting place to work as I was exposed to various projects and applications. Quite a heavy client-engaging workflow and would many times be sent out to discuss, architect, develop, and showcase work to and with our clients. I was able to participate in helping many non for profits, government agencies, and internal applications, and work on many exciting proof of concept applications for United Airlines. Many of which helped out client engagement and better track analytics for how each webpage was being used with heatmaps. There were many exciting backend PoC work with their infrastructure and migrating applications on docker to improve their development and deployment. I only left to join Health iPass to help with improving the lives of Americans during covid with a healthcare application that reduced the need for patients to physically be in the office to fill out forms and pay for their medical visits.

Conversant Media - *Software Engineer - Aug 2014 - Oct 2019*
Started on the Client Side Engineering (CSE) team. I've added new functionality to our node.js mock services to mimic our production services. Built out visualization tools to showcase the analytics of our test and production code using the d3 library.Built out a queuing system, using WebSockets and primus.io, for our test runner to ensure that we do not overuse the sauce labs instances allocated to our account. Prototyped APIs with sails.js and API blueprint. Wrote queries to aggregate data for CSE against Greenplum. The majority of the work has been done with Node.js, Javascript, Postgres, Greenplum, and Docker.

Past 4 years, I was moved over to the CAP (Client Access Portal) team, making sure that the API documentation and test coverage are at 100 percent. Also connected CAP's front-end Angular Protractor test up with Saucelabs for E2E testing. However, after doing much research,

end-to-end wasn't the ideal solution. As I reviewed our test suite, it was apparent that many tests should have been unit tests. So I helped trained members of our QA team to take over the end-to-end testing and worked at adding and improving our existing test suite while developing new features.

Since I had worked with docker on my previous team, I pushed for not only our team but the new department I was in to switch to docker. My team was running various Linux distros, Mac, and Windows versions, and reviewing pull requests were becoming quite time-consuming. So I dockerized our setup and planted the dreams of splitting part of our monolith application out. The application had our single sign-on (SSO) baked in. So every production deployment, applications would temporarily be out. We rarely updated this section, and it made sense to pull it out. I did this with several other features, and when implementing new features, I would suggest when a new feature should live in its own project and docker environment. Due to this, we were able to create new applications that leverage engineers from multiple teams to contribute, and I helped design our multi-application email and ui alert notifications. I've worked with docker swarm and traefik to handle load balancing and path resolutions, saving us from having to maintain lengthy nginx configs. Worked with our deployment team to create simple single-click deploys and rollbacks. Set up various QA staging environments so other teams can test their new features that are integrated with the new features they requested from CAP.

HackHands - *Mentor & Tutor*
I started mentoring and tutoring on Pluralsight's Hackhands website. It's a very enjoyable experience sharing knowledge and teaching others how to design, implement, and debug their code. I also tutor in person on my own from time to time.

WavaMedia - *Web Development Director*
I worked at a startup called, WavaMedia, a digital marketing agency in Chicago, IL. I ran the web development department and lead a team of developers. Responsible for client relations during the website development stage, analyzing the framework to best suit our clients' needs and budget, training and mentoring interns, managing our nginx server, delegating tasks to my team, and ensuring the quality of our work.

Freelancer
I've freelanced since 2008 and ended my freelancing to pursue working with a team of developers. Through my freelancing, I would create, build, update, and maintain websites for clients. Consult development teams on development practices. I would also do server installations, hardware, and software, as well as audio-visual setup for events.

Various tasks completed at Health iPass

Here are some of the various tasks and projects completed here.

Team Lead and Mentoring Developers
- Reviewed stories, tasks, and bugs to acquire additional information and to get requirements finalized before development and QA testing.
- Reviewed code and managed deployment of codebases I maintained to our testing environments.
- Made key architectural decisions that lead to a solid and easier-to-maintain codebase.
- Mitigated potential PII and HiPA violations through good coding practices and analysis of our application, network, and codebase.
- Mentored developers on knowing when, where, and how to reach out for help and answers when they get stuck. This also lead to mitigating phishing attacks on team members as they would quickly reach out about mysterious texts, calls, and emails.
- Mentored developers through various coding skills and mental habits.
- Mentored a poor-performing developer to become a solid, confident, and reliable member of our team.
- Created strategies for working with our overseas QA resources so our team can be more productive.

Customizable Style Sheets for Client Branding
- Created client-wide styles that were configurable on the AdminUI.
- Every client of ours takes advantage of it to enhance their branding through our platform.
- This service is used on almost all of our various client and patient-facing applications.

Patient Portal Refactor & Enhancements
- Refactored with solid code structure, style guide, and easy-to-main features.
- Identified existing bugs in the old architecture and corrected them.
- Allowed for new features to be quickly implemented.
- Created easy-to-login methods that interconnect with our various applications.
- Built-in features with an easy UI that drove high patient engagement and encouraged patients to pay their bills early. One time, too early, in fact, as a client didn't realize that they pushed a bill out to the patient, and the patient found and paid for it using the patient portal.
- Created client-wide styles that were configurable on the AdminUI. This a feature every single client of ours takes advantage of to enhance their branding. This service is used on many of our various applications.

ECI Refactor, Maintainance, & Enhancements
- Refactored with solid code structure, style guide, and easy-to-main features.
- The code was filled with years of poor maintenance as they did not have a solid Angular Lead.
- Refactored the code with reliable layouts, better auth structure and reusable components.
- Refactored code became so easy to use on the front and back end that our product owner had once written a small feature himself. By mimicking the good code in place, he had created a solid feature. Having good code really sets up the team for success, especially when working with junior developers.

Scheduling (Book My Doc) Maintainance & Enhancements
- Maintained and fixed bugs on an application I inherited.
- Improved the navigation flow of the application.
- Enhanced various screens to be configurable for our clients.
- Quickly implemented PoC for potential and onboarding clients while following up to make the features accessible to all clients.

AdminUI for ECI, Scheduling, Patient Portal, & Billing Portals
- Maintained and fixed bugs on our internal / client-facing Admin UI.
- Actively took over the responsibility of this to reduce dependencies on multiple teams during development. Which massively sped up the delivery time of our new features and reduced configuration-related bugs.
- Refactored parts of the AdminUI to look modern and have easier-to-maintain code.

Various tasks completed at Conversant

My workload varies on the task at hand and the availability of the team. I often switch back and forth between frontend and backend roles to fill the development need. There is a lot more work I have done, just a lot to write. We can always discuss more in person.

Proof of Concept Work
- With running stack on docker
- With creating simple staging and production deployments.
- Splitting out monolith code bases into easier-to-manage docker containers.
- With creating docker image builds with bamboo and our private docker repo
- Using a Kafka with our email microservices
- Using Kafka with our main application
- Integrating with saucelabs
- A custom extension of the javascript error object for our application
- Adding a persisting logging UUIDs to Kafka messages and express request

Leveraging features of CAP for our Conversant Exchange rewrite.
- Worked with other teams to allow our Conversant Exchange platform to use our single sign-on.
- Helped get their application to share the same look and feel as the rest of our applications.
- Updated our insight reports to work with conversant exchange users.
- Updated and created two new signup workflows for onboarding new users to the platform.

Implementing a notification system to be used across our various applications.
- Working with UI/UX
- Working with various other teams.
- Updating our development and staging docker stack deploys to use Kafka.
- Designing the system to only need to be updated for new email templates. As the notifications, we're customizable from the data provided in the Kafka message.
- Creating its own project, docker stack, and deployment environments.
- Writing documentation of how to deploy, implement, and integrate with other systems.
- Emphasizing the importance for a majority of our frontend angular code to be shared within our Angular CUIK library. This allows other teams to add notifications easily and seamlessly into their application.
- Ensuring a consistent look and feel across the company applications.

Rewrite our client management and company management sections.
- Integrating new designs

- Running implementation meetings
- Clientside and Serverside development.
- Working with the UI/UX
- Test coverage

CUIK
- Our new in-house UI/UX framework for Angular and non-angular apps.
- Updated breadcrumbs from the old system here.
- Testing out new features and comparing them with the old system.
- Training others on how to use the new system.

Clarity 5.x
- Our old in-house UI/UX CSS framework and angular 1.x common components library.
- Created breadcrumbs
- Created horizontal and vertical tabs
- Various documentation fixes
- Various bug fixes

Angular 1.x / Agular v4, v6, v8
- Writing test cases
- Upgrading controllers and directives to components (1.x)
- Upgrading Angular.js components to Angular 4+ components.
- Writing new features and services.
- Creating a docker container and stack deployment for both Angular.js and Angular.
- Applying CSS design from the UI/UX team.

Automate reports using data from Greenplum and Postgres.
- - Allows us to store our test information in our Postgres instance.
- - Needed to aggregate and store data in our Postgres instance.
- - Allows us to query Greenplum from our vm without internal users' credentials.
- - Allows us to query Greenplum and store subset data to our Postgres instance.

This is very necessary to review our test results and production results as data analytics are not willing to help.

Created and optimize queries for Greenplum.
- - Allows for queries to run from hours to minutes.

We had many queries that would take a considerable amount of time; the longest ones were over an hour. With the constant greenplum changes with access and permissions, the queries needed to be fine-tuned. It also brought awareness to the data warehouse team that we lacked the help and database structure we needed. This led to much help from them, and also they are going to implement some database changes to speed up our queries in the future with a table alright aggregated. Currently, we need to aggregate it with an initial query.

Created the first version of the Holmes API with its saving results to a docker vm instance of Postgres.
- ● - Used sails.js to quickly create the API endpoints to trial and test.
- ● - Created documentation and API test server.
- ● - Created database association maps

This set the beginning foundation for the current Holmes API. The database association maps were probably the most useful. I don't like to sound sour, but I felt as if I wasted time on the project.

Created a saucelabs queuing application to distribute available sauce labs vm instances access across teams.
- This allows for multiple internal users to run tests on sauce labs and not have conflicting vm instance issues. Avoids having too many vms in use by one test suite running that will block other test suites from running.

The impact isn't really that great currently, as only CSE is using it; however, with switching to the CAP team, I will be utilizing it to integrate their test with saucelabs.

Documented CAP Backend API and created additional tests.
Places cap at 100% documentation for their backend API services and 100% test coverage while allowing me to learn their system.

Integrating CAP's protractor test with Saucelabs.
- ● - Reduces their test run time by a little over 50%; after tests are optimized for saucelabs, they will run faster.

It's not automated with sauce-queue or Watson yet; however, that is the plan.

Created an application to generate reports by automatically executing batch queries to green plum, email reports, and storing the results in the CSE Postgres database daily.
- ● - Easy to add queries with a JSDoc-like commenting API to select whether to run, store, and email reports
- ● - Allows team members to have up-to-date vision data
- ● - Allows our browser market-share results to stay up-to-date.

This is a huge win for the CSE team, in my opinion. Results are ready before teammates in for the day. Holmes API will utilize the stored browser market-share data.

Other Work

Convention Foam Fighting conventionfoamfighting.com
Created a branding website and, most importantly, our waiver system. Convention Foam Fighting is a contact event hired by major conventions around the country. We used to maintain our waivers and check-ins with pen and paper. I revamped our process by building a liability waiver system. We can easily store, count, and scan in completed waivers of participants during the event. This has greatly sped up our workflow and reduced the number of people required for our registration team. Used Bootstrap, Bulma, Vue.js, and Node.js.

Shibiko AI shibiko.ai
AI Image generating website that focuses on the creation of anime characters. Used Machine Learning, Stable Diffusion, Python, PostgreSQL, WebSockets, Node.js, and Angular.

Byoga Chicago byogachicago.com
Install, Designed, and configured Node.js Express.js website upon the Nginx system.

O'Hare Airport T5 Opening chicagot5opening.com chicagot5opening.com/westfield/ http://chicagot5opening.com/photos/
Design website upon Apache system. Created HTML5 Video Player, HTML5 Photogallery, and set up infinite scroll behavior. Website created for O'Hare board members and associates.

In Good Taste ingoodtastemap.com
Install, Design, and configured WordPress website upon the Nginx system. Under the client's tight deadline. Created responsive design from a non-responsive PSD file that the client provided.

Westside Children's Therapy westsidechildrenstherapy.com
Install, Design, and configured WordPress website upon the Nginx system. Set up a website to meet government HIPPA standards.

Larry King Orchestra larrykingorchestra.com
Install, Designed, and configured Node.js Express.js website upon the Nginx system. Ajax page request, music player, scrolling client list.

Lightitech lightitech.com
Transfer, Install, Designed, and configured WordPress website from yahoo apache server to Rackspace Nginx system.