

# Andrew Chang-DeWitt

📞 (812) 266-0282

www [andrew-chang-dewitt.dev](http://andrew-chang-dewitt.dev)

✉ [hire-me@andrew-chang-dewitt.dev](mailto:hire-me@andrew-chang-dewitt.dev)

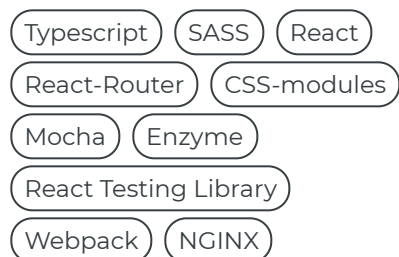
🐙 [github.com/andrew-chang-dewitt](https://github.com/andrew-chang-dewitt)

## Experience

### We Cook Sometimes

www [we-cook-sometimes.andrew-chang-dewitt.dev](http://we-cook-sometimes.andrew-chang-dewitt.dev)

🐙 [github.com/andrew-chang-dewitt/we-cook-sometimes](https://github.com/andrew-chang-dewitt/we-cook-sometimes)

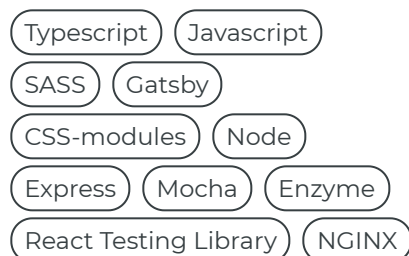


- A single-page web application to help my family & I to pick something to cook
- Hosts shared recipes for posts made to a cooking Instagram account my wife & I run
- Utilized Trello's API to get content from the board we already used to store all of our recipes
- Implemented [a custom graph data structure utility](#) for representing relationships between questions
- Developed [a Result type](#), similar to Rust's Result enum, to encapsulate success & failure states
- Planning on converting to a back-end API with a database populated from Trello using API hooks that parses recipes into more granular detail to allow for abstractions on ingredient types, time, yield, & other recipe characteristics
- More info: [andrew-chang-dewitt.dev/blog/posts/we-cook-sometimes](http://andrew-chang-dewitt.dev/blog/posts/we-cook-sometimes)

### Personal Website & Blog

www [andrew-chang-dewitt.dev](http://andrew-chang-dewitt.dev)

🐙 [github.com/andrew-chang-dewitt/andrew-chang-dewitt-website](https://github.com/andrew-chang-dewitt/andrew-chang-dewitt-website)



- A personal website to promote myself as a software developer
- Utilizes custom implementation of hash routing & anchor links on top of Reach Router
- Implemented blog with dynamically generated post pages, post list page, & filtering/sorting using GraphQL & a custom React hook for managing query parameters
- Found Gatsby & Mocha difficult to get to play well together—in the future, would like to convert the all the tests to Jest & rewrite any Enzyme tests to React Testing Library
- More info: [andrew-chang-dewitt.dev/blog/posts/personal-website](http://andrew-chang-dewitt.dev/blog/posts/personal-website)

## Pi GPIO Sensor to MQTT Module



[github.com/andrew-chang-dewitt/rpi-security-gpio2mqtt](https://github.com/andrew-chang-dewitt/rpi-security-gpio2mqtt)

Python

MQTT

pytest

Docker

Alpine Linux

bash

- An IOT microservice to monitor sensors attached to a Raspberry Pi's GPIO pins
- Intended to communicate with a custom home security alarm system, as well Home Assistant for home automations
- Uses Functional Core, Imperative Shell design pattern
- Distributed as a Dockerfile to aid in installation & maintenance
- Reads configuration from a user-maintained YAML file
- Implemented sensors as an extensible library to allow users to easily add new sensor types
- Planning to rewrite in Rust to be compiled for running on a microcontroller, such as Arduino or ESP32 board
- More info: [andrew-chang-dewitt.dev/blog/posts/rpi-gpio-sensors-mqtt](https://andrew-chang-dewitt.dev/blog/posts/rpi-gpio-sensors-mqtt)

## Education

### Ball State University

2009 - 2013, Muncie, IN

Completed 113 credits towards a Bachelor's of Landscape Architecture