

# BRIAN DAVID ARPIE

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## EDUCATION

Fairfield University *Class of 2014* [ **Magna Cum Laude** ] Fairfield, CT

- Major: **Computer Engineering** (Bachelors) | Minor: **Mathematics, Physics**
- Tau Beta Pi Engineering Honor Society
- Pi Mu Epsilon Mathematics Honor Society
- William T. Morris Foundation Scholarship (3 years x \$20,000)

## PROFESSIONAL EXPERIENCE

**Full Stack Software Engineer @ Crisply** (Machine Learning B2B SaaS Startup) Boston, MA  
[January 2014 - Present]

- created numerous **AngularJS** controllers, directives, services, & resources.
- created several **Rails** controllers, models, serializers, & migrations.
- created various charts and tooltips in **D3** (bar, bubble, timeseries).
- test driven development [**Minitest**, **RSpec**, **FactoryGirl**, **Jasmine**] and end to end testing [**Poltergeist**, **Capybara**]
- built a **Grunt** asset pipeline in order to replace the **Rails** asset pipeline [**Sprockets**] for test, development, and production environments.
- developed & maintained **Chrome & Firefox** browser extensions that logged user presence on user-defined white-listed sites & periodically sent the data to Crisply.
- worked on a cross-platform desktop application built with **Node-Webkit** and developed a file system monitor for OSX [**Objective-C**] and Windows [**C#**], equipped with a distiller [**Javascript**].

## PERSONAL PROJECTS

### Lightup Chessboard App

A new perspective on the classic game of chess; a 2D game of chess with a heatmap displaying intensity of control based on the position of all pieces and pawns. It is a passion of mine to teach others that the key to becoming a strong chess player is understanding positional play. Javascript[**AngularJS**], Package Manager[**Bower**], Test Coverage[**Jasmine**], CI[**Travis CI**], Version Control[**Git**].

### Passively Managed ETF Machine Learning App

An ongoing project that aims to identify investment opportunities based on the daily positional changes of passively managed ETFs. The **psql** database and RESTful API were built with **Ruby on Rails**. All controllers and models are covered in **RSpec** unit tests and hooked up to **CI**. The app is deployed to **Heroku** and runs a daily job that scrapes ETF constituent data. The machine learning aspect of the application is still in development and will feature a gradient descent algorithm implemented in **C++** or **Rust**. The small front end portion of the app was built using **TDD** with **AngularJS** and **D3** and serves to provide simple visualizations.

## AUTODIDACTIC SKILLS

**Spanish:** fluent(speaking, reading, writing)

**Chinese:** intermediate(speaking[Mandarin], reading, writing[traditional & simplified])

**Greek:** elementary(speaking, reading, writing)

**Chess:** USCF Class A Chess Player (Rated 1858)

**Investing:** I manage a personal portfolio consisting of a diversified selection of low expense ETFs.

**Rubik's Cube:** I can perform a 1 minute solution using a basic layer-by-layer method with a series of advanced middle layer algorithms.

## OTHER INTERESTS

Bitcoin poker, translating the daodejing (道德經), singing in foreign languages, latin dancing, playing instruments (guitar, piano, synth, bongos, güiro, vibraphone, tabla, 笛子), performing spanish love songs, making payments with decentralized deflationary cryptocurrency, \$1/\$2 no limit hold 'em cash games