# Greg Ziegan

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## **Full-Stack Software Engineer**

College Grad with 2+ years of Object Oriented design and industry programming experience

- **Knowledgeable about REST API design** experienced with CRUD+L designs and am researched in Hypermedia methodologies, libraries, and serialization standards.
- Experience with Reactive Programming patterns including Rx Observables and utilizing FP concepts like reducers to affect application state.
- Functional experience with Machine Learning used concepts from ML grad course to craft a real world code solution to image classification at my extended co-op.

#### **Technical Tools**

Languages: Python, Java, JavaScript, SQL, Common Lisp, Swift

**Frameworks:** Django, Django REST Framework, Flask, React, Redux, Node.js **APIs/Libraries:** React.js, jQuery, NLTK, Scikit-Learn, SQLAlchemy, RxJava, Dagger

Platforms: Android, iOS

Databases: MySQL, Postgres, Realm (mobile), MongoDB

### **Professional Experience**

Software Engineer, 5/13 to 8/15 – VERTICAL KNOWLEDGE, CHAGRIN FALLS, OH

Contributed to both internal-use and client-facing web applications. Responsibilities alternated between agile product development and the collection, normalization, exportation, and sometimes analysis of client-commissioned third-party web data.

\*\*Achievement Highlights:\*\*

- Rewrote part of a client-facing native web app in React.js with Redux as the state solution in an effort to encourage component-based design patterns, a Flux over MVVM architecture, and cleaner code practices.
- Developed ad classification software that matched image advertisements with their corresponding companies. The process received a large set of image data and detected color and spatial features with the SLIC clustering algorithm. The produced segmented images were used to train an SVM. The SVM was then able to predict the correct corresponding company for new image advertisements with 95% accuracy.
- Built a candidate-screening tool that allows the company to view an online examination of technical and nontechnical applicants. Custom exams can be uploaded and candidates take the exam via a unique hyperlink.
- Created a Location comparison system built on top of Django to compare millions of addresses with a multi-threaded algorithm that computes a similarity score based on geographic distance.

## **Side Projects**

- Wrote a website (<a href="http://botterdre.com">http://botterdre.com</a>) that generates randomized lyrics to songs by spidering lyrics.com and uses simple Markov chain rules to produce a new song.
- Anovelmous (<a href="https://github.com/anovelmous-dev-squad">https://github.com/anovelmous-dev-squad</a>)
  - o Have begun development on a multi-platform application: Web, iOS, & Android.
  - Collaborating with 3 other friends and colleagues.
  - The premise is to facilitate a collaborative novel determined by the most popular user submitted words with a series of short voting windows.
  - The app utilizes strict grammar rules defined by a natural language processing library to aid in the novel's readability.

#### **Education**