# **Greg Ziegan**

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A young software developer possessing passion for researching new tech, writing clean, extensible code, and comprehending problems concerning each stage of the development cycle.

### **Summary of Qualifications**

- Expertise in web development, and a solid foundational understanding of MVC design practices.
- > Experience in writing and maintaining large scale spiders which interact with relational or document based databases to generate a report of a site's contents over time.
- > Utilization of functional and object oriented design principles.
- > Ability to work cohesively with a team of software engineers while communicating with clients and/or managerial staff members.

## **Technical Expertise**

Languages: Python, Java, Javascript, Common Lisp, Objective-C, C, SQL

Frameworks: Django, Flask, Node.js, iOS Frameworks

APIS: jQuery, nltk, scikit-learn, numerous company-specific APIS

Systems: OSX, Linux

# **Professional Experience**

#### Chagrin Falls, OH

#### Software Developer at Vertical Knowledge (May 2013 — Present):

Wrote spiders on a closed-source framework that uses an anonymization network to fetch large amounts of data from retail, government, social media, and various other sites genres. Responsible for the maintenance of recurring spider collections and developing new practices for reverse engineering a website.

- 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.
- 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. Cheating is monitored by maintaining a log of unique IP addresses used to access the candidate's exam.
- Constructed a tool to check a massive list of usernames against a potentially large number of
  websites and export a report showing whether the usernames possess a status of valid, invalid,
  forbidden, etc. on each site.
- A web application that creates single-page advocacy websites with a simple single-page form.
- Research involving a generic business information parser, which would potentially parse out relevant information about a business across unknown page formats.

### **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 using an algorithm to produce a new song using grammar rules established in a python script.
- Wrote another private website(<a href="http://vbjexchange.com">http://vbjexchange.com</a>) that simulates a primitive trading network based on a joke currency between college friends.
- Anovelmous:
  - Have begun development on a two-platform application: web & iOS.
     The premise is to facilitate a collaborative novel determined by the most popular user submitted words.
  - The app utilizes strict grammar rules defined by a natural language processing library to aid in the novel's readability.
- Currently writing polygon lattice generating software in Common Lisp to potentially be used for solving a subset of combinatorial mathematics problems.

#### Education

Case Western Reserve University, Cleveland, OH B.S. in Computer Science Candidate Expected Graduation: December 2015

#### References

Chris Fietkiewicz: current research advisor at CWRU Email: cxf47@case.edu

Ross Salupo: current CTO at Vertical Knowledge. Email: ross.salupo@vertical-knowledge.com

Jon Sustar: former senior software engineer at Vertical Knowledge.

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