

# Brady Olsen

Experienced Platform Developer with Killer Data Skills

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## **Summary of Qualifications:**

- Brady Olsen is a well-rounded professional software developer with several years experience developing and maintaining a wide variety of systems for scientific research institutes and technology companies.
- Brady specializes in developing web applications and data analysis pipelines, utilizing the best tools and techniques in the industry.

## **Technology Experience:**

- *Frameworks:* Zend Framework, Symfony, REST, Solr, Junit, Grails, HTML5 Boilerplate, jQuery, Twitter Bootstrap, LESS, AWS
- *Programming:* PHP, Java, Python, Perl, R, Javascript, XML, JSON, Bash
- *Tools:* Git, Ubuntu, Apache, MySQL, SQLite, Vagrant, GTD, Scrum, Confluence, Jira

## **Recent Work Experience:**

### *Tango Card, Inc (8/1/2012 – present)*

- Built enterprise integrations with several third party data APIs
- Developed SaaS Platform with REST-ful data API
- Rebuilt digital gift card e-email system to handle event tracking (delivery, click, open) for over 15000 emails per day
- Improved deployment scripts for load-balanced application servers on AWS with multiple environments (development, testing, production)
- Worked with business experts to define our platform domain language
- Planned out an incremental rebuild strategy of large and unstable legacy codebase
- Trained new developers on system architecture and hosted code reviews

### *Kaeberlein Lab, University of Washington (8/1/2008 – 8/1/2012)*

- Developed a content publishing system for aging research resources with a moderated work-flow for user submissions and version tracking.
  - Site: <http://sageweb.org>
  - Code: <http://github.com/bradyo/sageweb>
- Developed a program to monitor changes in experiment data across multiple research facilities (>4000 individual Excel files) and generate compiled reports for managers when experiments are completed.
  - Code: <http://github.com/bradyo/RlsMonitor>
- Designed and deployed a moderated, user-driven lifespan observation database. Data

access over REST API in development.

- Site: <http://sageweb.org/lifespandb>
- Code: <http://github.com/bradyo/LifespanDatabase>
- Developed a program to pool data across hundreds of experiment files and compute inferential statistics between data samples. Provided an easy to use web interface for browsing and searching results, allowing researchers to utilize years worth of experimental data.
  - Code: <http://github.com/bradyo/YeastRIsDatabase>
- Developed a web application allowing researchers to upload and analyze growth curve data files generated by a high-throughput measurement device.
  - Site: <http://sageweb.org/yoda>
  - Code: <http://code.google.com/p/sageweb-yoda/>
- Wrote a program to plot and analyze data from polysome gradient experiments. The program allows scientists to interactively select points on a plot, align curves based on key features, and get statistics on peak areas, greatly simplifying analysis efforts.
  - Code: <http://github.com/bradyo/PolysomeAnalyzer>
- Created Lab and Program websites with a simplified backend for managing site content.
  - Sites: <http://kaeberleinlab.org>, <http://uwaging.org>
- Wrote various scripts in python and R for analyzing and plotting lab data.
- Managed internal lab servers (web apps, databases, and large file storage)

*Trask Lab, Fred Hutchinson Cancer Research Center (9/1/2007 - 8/1/2008)*

- Developed software for mapping genome-wide motifs using a published algorithm allowing scientists to search gene sequences for unknown protein binding sites.

### ***Additional Work Experience:***

*Gordon Lab, UW Dept. of Physiology/Biophysics (autumn-spring 2006)*

- Developed a Java simulation for a concerted protein-ligand interaction model to help students manipulate parameters in real-time and better understand the model.

*Maxim Integrated Products Internship (summer 2006)*

- Improved the yield enhancement process by deploying a defect database system.

*Maxim Integrated Products Internship (summer 2005)*

- Wrote a graphical user interface for programming a Field Programmable Gate Array, allowing engineers to test the device.
- Wrote a block diagram design plug-in that allows Visual Studio users to easily draw schematics during design-time.

*Harris Hydraulics Lab, UW (winter 2005)*

- Wrote R programs to simulate thermal motion of microscopic particles that helped disprove a hypothesis of nanomolecular water re-structuring.

*Maxim Integrated Products Internship (summer 2004)*

- Designed and implemented an internal software submission system to help developers distribute software to test engineers.

*Maxim Integrated Products Internship (summer 2003)*

- Designed and developed visualization software for an RF spectrum analyzer.

*Oregon Graduate Institute Internship, Oregon Health Sciences University (summer 2002)*

- Programmed a graphical display for an autonomous vehicle neural network model.

### **Education:**

*Bachelor of Science in Biochemistry - University of Washington (June 2008)*

- Relevant courses: Data Structures & Algorithms, Artificial Intelligence, Computational Chemistry, Statistics, Differential Equations, Matrix Algebra, Multi-variable Calculus

### **Awards:**

*Mary Gates Research Scholar - University of Washington (2007-2008)*

*Rotary Award in Computer Science - Tigard High School (2003)*