## **Todd Branchflower**

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Skills:

Javascript: Frontend: Underscore, Backbone, Marionette, Jasmine. Backend: Node, Express, Grunt.

PHP: Zend, Phalcon, Phpunit.

General: MySQL, MongoDB, RabbitMQ, git, bash / zsh, vim, Linux (Arch).

Embedded: Assembly / C (microcontrollers), VHDL (FPGAs), SPI / UART / I2C

**Education:** 

9/10 to 3/12 Stanford University Stanford, CA

Master of Science in Electrical Engineering

6/03 to 5/07 United States Air Force Academy Colorado Springs, CO

Bachelor of Science in Computer Engineering

## **Experience:**

9/14 to present *Software Developer* mywedding.com

- Design and implement RESTful APIs in Phalcon / Zend, unit-tested with PHPUnit
- Design and implement Single Page Applications in Backbone and Marionette, unit-tested with Jasmine
- Integrate with datastores and backend services (MySQL, MongoDb, RabbitMQ) as well as 3rd party APIs
- Present talks to developers on unit testing techniques, object oriented design, and memory management

3/12 to 9/14 Captain / Assistant Professor of Electrical and Computer Engineering
United States Air Force – United States Air Force Academy, CO

- Ranked in the top 10% of Company Grade Officers on the faculty by the Dean
- 2014 Brigadier General Roland Thomas Award winner for Outstanding Contribution to Cadet Education
- Adapted Lean Startup concepts to senior design course, won Engineering Division Team of the Year
- Rewrote/directed entire junior-level digital course sequence:
  - o Microcontroller course on assembly / C programming, hardware interfacing
  - o Advanced digital systems course on FPGAs, HDLs, hardware / software co-design

5/07 to 8/10 Lieutenant / Test Engineer

United States Air Force – Eglin Air Force Base, FL

- Consistently ranked at top of peer group 2008: #2/25 2nd Lts, 2009: #1/41 Lts, 2010: #2/46 Lts
- Selected as Executive Officer to the squadron commander
- Led testing of Air Force's next-generation computer network defense systems
- Directed 20-person aircraft digital radio assessment team, supported combat exercises