Zak **Strassberg**

Full Stack Web Developer

 (812) 925-5227   Mountain View CA   zakstrassberg@gmail.com

 zakstrassberg.com   zakstrassberg   zakstrassberg

Zak in a box

An early proclivity for computers led me to a Java course at the University of Maine at age 11. By high school I was working at a graphic design firm and freelancing in my spare time. An interest in bioengineering introduced me to bench science and laboratory research: I studied Biology at McGill University and worked in 4 top-notch research institutions, most recently Stanford School of Medicine. The same skills that make me a great scientist make me a superb coder. Coding Dojo allowed me to formalize my self-taught education, raising my development skills to the next level. I must have impressed the staff, as they offered me a teaching position straight out of the program. I am now looking for a non-academic position where I can put my skills to use and gain experience shipping a product.

Skills

Languages	JavaScript (ES2016+), Ruby, Python, HTML5 & CSS3 (including HAML, Pug/Jade, Slim, SASS)
Server	AWS, Heroku, private VPS (8+ years of web & game server administration)
Databases	SQL & MySQL, MongoDB, Postgres, Redis
Frameworks	Angular, Vue, Rails, Flask, Bootstrap, Semantic UI, Materialize
Other technologies	Vim/Neovim, Linux (Debian), Photoshop, Amazon Alexa Skills, LaTeX/XeTeX, git, Webpack, Electron
Miscellaneous	SCRUM, TDD, StackOverflow

Projects

Dude Where's My Truck? – Python stack project   *foodtrucks.zaks.pw*

- Web app that uses data.gov to **dynamically filter and display food cart hours and locations** in SF.
- Responsible for all **front-end development** and **project management**.
- **Technologies used:** Pylot (Python MVC framework), Google Maps API, Google Geometry API, Data.gov API, Twilio, FontAwesome, Moment.js, Bootstrap, jQuery
- Group project (2 person) completed in 4 days. **Won first place in August Python hackathon.**

Tetromino – MEAN stack project   *tetromino.herokuapp.com*

- Web app that allows visitors to compete against each other in **multiplayer Tetris**.
- **Technologies used:** Node, Mongo, Express, Vue, Bootstrap, websockets/Socket.io, Heroku
- Individual project completed in 4 days. **Won first place in September MEAN hackathon.**

Ninja Messages – Rails stack project   *ninja-messages.herokuapp.com*

- Threaded Rails **messaging board with live-reloading posts and activity notifications**.
- **Technologies used:** Ruby on Rails, websockets/ActionCable, Vue, Postgres, Redis, SASS, Slim, Bootstrap.
- Not TDD due to time constraints but wrote key feature tests using RSpec, Capybara, and FactoryGirl.
- Individual project completed in 5 days. **Won first place in October Rails hackathon.**

Dice Rolling Bot for Discord – Passion project   *github.com/zakstrassberg/exalted-roller*

- Open source Node.js bot and dice roller for the gaming-centric Slack clone Discord.
- **Technologies used:** Node.js, Discord.js, JavaScript ES2016
- Currently utilized by over 150 users in 6 servers.

See more of my work at ZakStrassberg.com

Education

Coding Dojo Silicon Valley CERTIFICATE OF COMPLETION - TRIPLE BLACKBELT   *July - October 2016*
- Acknowledged as **first in class** by peers and staff alike, achieving a perfect score on all stack exams while sweeping monthly hackathon competitions.
- **Accepted teaching position** upon completion of course.

McGill University BSc IN BIOLOGY   *September 2010 - April 2013*
- **Completed Bachelors in 3 years**. Comprehensive study of molecular biology with a focus on genetics.

Experience

Coding Dojo Silicon Valley TEACHING ASSISTANT   *Dec 2016 - present*
- Group and one-on-one instruction of Coding Dojo students.
- Responsible for running demonstrations of technologies and assignments, developing Linux curriculum.

Stanford University School of Medicine LIFE SCIENCE RESEARCH ASSISTANT I   *October 2015 - July 2016*
- **Microscopy and data analysis** for Chief of Consultative Cardiology at Stanford School of Medicine.
- License to technology of principal project recently sold to Eiger BioPharmaceuticals.

PAVIR / VA Palo Alto / Stanford University RESEARCH ASSISTANT II / LAB MANAGER   *April 2014 - July 2016*
- **Focused on *in vivo* research** including histology and data analysis.
- **Primary lab surgeon** and animal handler: mastered arterial excision and subQ implantation surgical models.
- **Responsible for generation and submission of technical documents and reports to regulatory bodies.** Liaison between the lab and Stanford/VA. Experience working with and reporting to Department of Defense.
- Streamlined several administrative and managerial aspects of the position through scripts and automation.

Boston University School of Medicine MICROBIOLOGY RESEARCH VOLUNTEER   *January 2014 - March 2014*
- Developed Biosafety Level 4 cell culture techniques as well as viral growth inhibition assays.
- **Self-taught Python for data analysis project:** created system to automatically plot promising results from a massive database of automated tests. Developed passion for clean code and good-looking data.

McGill University RESEARCH ASSISTANT   *April 2012 - April 2013*
- Research assistant Summer 2012, invited to stay in lab year-round.
- Developed autoinduction media for bacterial cultures, optimized cell culture protocol to maximize protein yield, learned drosophila and bacterial culture techniques as well as recombinant technology.
- **Self-taught LaTeX, XeTeX, R, and data visualization techniques.**

Pica Design WEB DESIGNER   *Summers 2005-2008*
- Web design and development. **Created pixel-perfect HTML & CSS** from PSD mockups by senior designers.
- Responsible for development and maintenance of custom Wordpress and Drupal themes and installs.

Zak Strassberg Design WEB DESIGNER   *2005-2009*
- Freelance graphic design: wrote, deployed and maintained websites for supplemental income during High School.

Publications

2016	Engineering Pre-Vascularized Skeletal Muscle for Treatment of Volumetric Muscle Loss	*Tissue Engineering*
2016	Co-Injection of Induced Pluripotent Stem Cell-Derived Endothelial Cells With Shear Thinning Hydrogel Enhances Survival and Angiogenesis in a Murine Model of Peripheral Arterial Disease	*Circulation*
2016	Combinatorial extracellular matrix microenvironments promote survival and phenotype of human induced pluripotent stem cell-derived endothelial cells in hypoxia	*Acta Biomaterialia*
2016	Aligned nanofibrillar collagen scaffolds – Guiding lymphangiogenesis for treatment of acquired lymphedema	*Biomaterials*
2015	Protein-Engineered Hydrogels for Improved Efficacy of Stem Cell-Based Injection Therapy in a Murine Model of Peripheral Arterial Disease	*Circulation*