

# Pradyumna Shembekar

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## Education

M.S., Computer and Systems Engineering	California State University, Los Angeles	June 2016	3.5/4.0
B.E., Electronics and Telecommunication Engineering	Gujarat Technological University	May 2013	

## Work Experience

- **Web Developer - Intern, Aflac Inc, Los Angeles, Aug 2015 - December 2015**  
Created a recruitment website in PHP using elegant MVC design patterns. Integrated with Wordpress and developed a tablet and mobile version. Implemented efficient JavaScript for better response time. Communicated with the HR and design team to meet up with their requirements.
- **Text Transcriber, California State University, Los Angeles, Aug 2014 - March 2016**  
Transcribed textbooks into accessible formats on Kurzweil and Omnipage. Developed an accessible form in PHP for disabled students to submit requests for books online.

## Independent Projects (selected)

- **Reps & Sets** 🍷  
Built a web-application to track your workouts and calculate your progress. Users can sign-up, search and follow friends, compare workouts with their friends and family. The app displays a graphical interpretation of the user's workouts' summary. A **Behavior Driven Development (BDD)** approach with automated testing using **RSpec**, **Capybara**, and **Guard** testing suites. Deployed to **Heroku**. (Ruby on Rails)
- **Belly Bites** 🍷  
A web-application to browse and create recipes. Users have the ability to sign up, up-vote recipes, add their own recipes, and check recipes added by other chefs. A **Test-Driven-Development (TDD)** approach, back-end framework in **Ruby on Rails**, and **SQLite** as database. Deployed to **Heroku**. (Ruby on Rails)
- **Modified MIPS Lite (MML) Multi-cycle Design (3 members)**  
Designed multi-cycle datapath and the finite state machine for MML. Programmed ALU, clock generator, and contributed towards Main Controller. Played the role of a Lead Test Engineer, responsible for setting benchmark values for various modules. Simulated and tested use cases through **Xilinx** software. (MIPS, Verilog)
- **Rice Rocks** 🍷  
Built a web-based classic arcade game of a spaceship shooting missiles at rocks. Part of Coursera's course on Interactive Programming in Python. (Python)
- **Car Automation System**  
Created an application to detect open doors and engine state of a car and display messages on LCD. Used Motorola 68HC11A8 micro-controller and simulated using **ThrSim11**. (C, MIPS)

## Awards

- **Woman's Health Alliance - Hackathon 2015**  
**Runners up** team (6 members)  
Developed a web app to calculate a woman's risk of having a Cardio Vascular Disease (CVD) by setting threshold values obtained from cardiologists.

## Skills

- Languages: C, C++, JavaScript, PHP, Python, Ruby, Swift