

Pradyumna Shembekar

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Education

- **California State University** Los Angeles, CA
M.S., Computer and Systems Engineering (3.5 GPA) March 2014 - June 2016
- **Gujarat Technological Institute** India
B.E., Electronics and Telecommunications July 2009 - May 2013

Independent Projects (selected)

- **Reps & Sets (Ruby on Rails)**
 - A web-application to track your workouts and calculate your progress.
 - Users can sign-up, search and follow friends, compare workouts.
 - The app displays a graphical interpretation of the user's workouts.
 - A **Behavior Driven Development (BDD)** approach with automated testing using **RSpec**, **Capybara**, and **Guard** testing suites. Deployed to **Heroku**.
- **Belly Bites (Ruby on Rails)**
 - 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**.
- **Modified MIPS Lite (MML) Multi-cycle Design (3 members), (MIPS, Verilog)**
 - 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.
- **Rice Rocks (Python)**
 - Web-based classic arcade game of a spaceship shooting missiles at rocks.
 - Part of Coursera's course on Interactive Programming in Python
- **Car Automation System (C, MIPS)**
 - Application to detect open doors and engine state of a car and display alerts on LCD.
 - Used Motorola 68HC11A8 micro-controller and simulated using **ThrSim11**.

Work Experience

- **Aflac, Inc.** Web Intern, Winter 2015
 - Developed a recruitment website.
 - Converted responsive HTML to dynamic content in PHP using elegant MVC design patterns and integrated with Wordpress.
 - Used different JavaScript and CSS frameworks for better response time.
- **California State University** Text Transcriber, present
 - Transcribed textbooks into accessible formats on Kurzweil and Omnipage.
 - Developed an accessible form in PHP for disabled students to submit requests for books online.

Awards

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