

# Pradyumna Shembekar

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## Education

- **California State University** Los Angeles, CA  
*M.S., Electrical and Computer 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.