

# SHASHANK MUCHELI

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## **Research / Professional Interests**

Operating Systems, Web Programming, Parallel and Distributed Systems.

## **EDUCATION**

### **University of Massachusetts Dartmouth**

Masters, Computer and Information Science. Current GPA: 3.3

Parallel and Distributed Systems, Theoretical computer science, Advanced algorithms and complexity, Advanced computer systems, Artificial Intelligence, Large software systems, Paradigmatic software development, Gamification in Bioinformatics.

### **Bangalore University**

Bachelors, Computer Applications. GPA: 3.5(64% aggregate)

## **TECHNICAL SKILLS**

- Web Technologies: HTML, CSS, JavaScript and PHP.
- OO Technologies: Java and C++.
- Programming: C programming, Shell scripting.
- Databases: MySQL
- Revision control systems: Git and SVN.
- Web services: AWS (Amazon web services), Apache, Lighttpd.
- Content management systems: Wordpress, Drupal.
- Tools: Eclipse and Netbeans, Vim, Microsoft visual studio.
- Development: Logical, Analytical, Problem solving and Debugging skills.

## **WORK EXPERIENCE**

**University of Massachusetts Dartmouth** (Graduate Research Assistant: Sept 2014 – Present)

**Principal Investigator:** Dr. Firas Khatib (Dept. of Computer and Information Science)

- **Foldit (<http://fold.it/>)** : Worked on the popular crowdsourcing protein folding game Foldit. Have worked on the introductory levels of the game by editing and modifying major portions of it.
- **Foldit website development environment:** worked on setting up a development environment for the website on a EC2 instance of AWS.
- **Slipknot detection algorithm:** working on an algorithm which detects slipknots in a protein chain and efficiently remove all of them from a protein chain which will result in improving the stability of the protein structure.

**Wisely Online Services Pvt. Ltd** (Application Developer: Sept 2013 – Jan 2014)

Developed, hosted and maintained projects of the firm's clients using PHP scripting, website and database design.

**Projects:**

- **Personality Smart:** A responsive web application which could evaluate a person's mindset based on quizzes and surveys. This website was developed using Codeigniter, a Model – View – Controller framework, and MySQL database.
- **Aptitude Testing Website:** One of Wisely's clients wanted a testing platform for a new course, which could log all the scores and contact details in a database and send out emails and generate custom score cards and email it using OO PHP, fPDF API and MySQL.
- **ManlyDeck Bar and Restaurant:** Developed parts of a website to book a deck, platter and hall online for ManlyDeck, a growing Australian Restaurant chain, providing multiple interfaces for admin, restaurant staff and the customer. Users could check the availability and book a deck/meal on any given date in the year. I worked on integrating PayPal to make the payments, developed using OO PHP, Codeigniter (MVC) and MySQL.
- **Engagewise.com:** A website to post ads to multiple groups and pages on Facebook at once and log all the leads generated. I integrated Facebook PHP API, using which the users could schedule posts to be made at a time zone specific time. The project also required an e-campaigning platform and a registration platform to manage payments, subscriptions, email reminders and updates using InfusionSoft API.

**Direct-I Internet Solutions Pvt. Ltd.** (Web Solutions Specialist: May 2012 – Feb 2013)

- Managed the web space on Linux and Windows servers, managing DNS records of domains, and troubleshooting customer complaints.
- Administered web space by creating, modifying, moving and organizing the data of clients.
- Performed domain management by adding the appropriate DNS records to respective domains such that they would point to the correct server and work as expected.
- Trained on sandbox servers with jailed logins to administer everything via command line.

**Undergraduate Projects**

- Developed a Billing and Inventory Management Software using Visual Basic 6.0 as front end and MySQL as a backend.
- Developed a site which can be used for aptitude testing by the companies and institutes to test the students using HTML, CSS, JavaScript (jQuery Library), PHP, MySQL

**OTHER ACTIVITIES:**

- Represented the college to the NAAC committee during 2009 and played a crucial role in acquiring the prestigious accreditation.
- Won 1<sup>st</sup> prize in IT quiz in the 2010 College Tech Fest.
- Other interests include reading novels, listening to music, reading tech sites, exploring tips and tricks, and event management - I have successfully coordinated technical and non-technical events in my college.