

# SHASHANK MUCHELI

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## **RESEARCH / PROFESSIONAL INTERESTS**

Web programming, parallel and distributed systems, research tools/application development.

## **EDUCATION**

**University of Massachusetts Dartmouth** (in progress, currently enrolled)

Masters, Computer and Information Science. **GPA: 3.4**

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** (2012)

Bachelors, Computer Applications. **GPA: 3.5** (64%, as interpreted by World Education Services)

## **WORK EXPERIENCE**

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

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

- **Slipknot detection algorithm:** This project improves the knot detection algorithm, Knotfind, to find slipknots in proteins, which are not mathematical as the knotted chain doubles back on itself, we came up with an algorithm to detect slipknots in protein chains and visualize them.
- **Foldit (<http://fold.it/>):** Improved a few game levels in the popular protein folding game foldit.
- **Foldit website development environment:** Worked on Amazon EC2 instance to set up a lighttpd server to deploy development version of the foldit's massive website.

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

- **Personality Smart:** A responsive web application which could evaluate a person's mindset based on quizzes and surveys. The website was designed in MVC architecture.
- **Aptitude Testing Website:** Developed a website for student evaluation which could generate custom score cards by analyzing the scoring patterns and send out feedback to the students who took the test. Developed with OO PHP with MySQL DB.
- **ManlyDeck Bar and Restaurant:** Developed parts of an MVC design based website to process online bookings along with PayPal integration for ManlyDeck, a growing Australian Restaurant chain. Developed multiple user interfaces for admin, restaurant staff and the customer.
- **Engagewise:** A next generation website to improve leads and by marketing products using Facebook PHP API. The website had everything an advertiser would need, like, lead count, graphs, schedulers, reminders etc., Integrated this OO PHP site with Infusionsoft and popular CMS to manage payments and billing reminders.

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

- Managed the web space on Linux and Windows servers and troubleshooting complaints.
- Administered web space by creating, modifying, moving and organizing the data of clients.
- Performed domain management and setup mail servers by adding appropriate DNS records.
- Trained on sandbox servers with jailed logins to administer everything via command line.

## **TECHNICAL SKILLS**

- Web Technologies: HTML, CSS, JavaScript and PHP.
- OO Technologies: Java and C++.
- Programming: C programming.
- Databases: MySQL.
- Revision control systems: Git and SVN.
- Web services: AWS (Amazon web services), Apache, Lighttpd.
- Content management systems: Wordpress, Drupal.
- Development: Logical, Analytical, Problem solving and debugging skills.

## **PERSONAL INTEREST:**

- Represented the college to the NAAC committee as freshmen and played a crucial role in acquiring the prestigious accreditation.
- Winner of intercollegiate IT quiz in my sophomore year.
- Developed a platform for recruiters to conduct tests for a variety of students based on the job role for the final semester project.

## **REFERENCES:**

1. Dr. Firas Khatib – UMass Dartmouth – Assistant Professor – [fkhatib@umassd.edu](mailto:fkhatib@umassd.edu)