

Mihir Kavatkar

10656 Caminito Chueco · San Diego · CA 92126 kavatkar@usc.edu (508)-542-8521

EDUCATION

UNIVERSITY OF MASSACHUSETTS DARTMOUTH

NORTH DARTMOUTH, MA

Master of Science in Computer Science.

Graduation Date: May 2016.

Cumulative GPA: 3.63.

VIDYALANKAR INSTITUTE OF TECHNOLOGY

MUMBAI, INDIA

(AFFILIATED TO MUMBAI UNIVERSITY)

MAY 2014

Bachelors in Computer Engineering. Graduated with First Class. GPA: 3.5 out of 4.0

TECHNICAL SKILLS

OpenACC	C/C++	Python	Java	JavaScript	HTML	CSS	Swift
NPACI Rocks	Linux	Mac OSX	Portable Batch System	AngularJS	MongoDB	ExpressJS	NodeJS

PROFESSIONAL EXPERIENCE

ATRI (ALZHEIMER'S THERAPEUTIC RESEARCH INSTITUTE) - UNIVERSITY OF SOUTHERN CALIFORNIA

SAN DIEGO, CA

PROGRAMMER ANALYST II

AUGUST 2016 - PRESENT

- Development and testing of the platform interface for the data of ATRI clinical trials.
- The interface tool is been developed using python-Django for back-end and AngularJS on frontend.

ELECTRA VEHICLES, INC

BOSTON, MA

SOFTWARE DEVELOPER INTERN

JULY 2016 - AUGUST 2016

- Developing a hybrid app which can be deployed on ios and android platforms. The app uses Ionic Framework which uses AngularJS for the front-end. The Backend is developed using ExpressJS and a node server. Behaviour driven testing is conducted where the app uses angular-mocks for front-end, while Mocha and chai for the backend and routes which is integrated with Gulp(task runner).
- Electra Vehicles have a hybrid energy storage platform for Electric and Hybrid Electric Vehicles where the app will be a bridge for using it as well as monitoring and logging the behaviour of the system.

UNIVERSITY OF MASSACHUSETTS DARTMOUTH

NORTH DARTMOUTH, MA

BUILDING A SUPERCOMPUTER INFRASTRUCTURE

MAY 2016 - JUNE 2016

- Building a 32 node supercomputer cluster using the Nvidia Jetson TX1(Tegra). I have fully configured all the system to have password less access from the head node and also contributing for integration and networking of all the nodes. Future plans are to extend the cluster to a total of 64 nodes.
- Building another 40 node supercomputer cluster using x86-64 high end GPUs. I am in the process of installing Rocks Cluster Distribution(NPACI Rocks) on the supercomputer and also contributing to the integration and networking of all the nodes.

UNIVERSITY OF MASSACHUSETTS DARTMOUTH

NORTH DARTMOUTH, MA

RESEARCH ASSISTANT

DECEMBER 2014 - MAY 2016

Master's Thesis: Projects in GPU Computing with Performance and Benchmark Analysis.

- Successfully defended my Master's thesis. The objective was to benchmark an open parallel programming language OpenACC in terms of performance, portability and ease-of-use. Two heavy computation model in the field of Black hole physics - a Teukolsky equation and a Scalar Collapse code was used for the research. Finally, a case study on distributed computing with deep learning was also a part of my Master's thesis.
- Programming Language: C, OpenACC, OpenCL and CUDA.

PATTERNS AND PREDICTIONS, INC.
SUMMER RESEARCH ASSISTANT INTERN

NORTH DARTMOUTH, MA
JUNE 2015 - JULY 2015

- Firstly, assessment and testing of current code of the company's project on Artificial Intelligence (www.drlearn-er.org). Furthermore, development of a high-level python script to remotely execute different instances of the project on Amazon's Elastic Cloud(EC2) cluster with different parameters and analyzing the best performing node in the cluster.
- Programming Language: Python, C.

UNIVERSITY OF MASSACHUSETTS DARTMOUTH
RESEARCH PROJECT: BENCHMARKING C VERSUS SWIFT

NORTH DARTMOUTH, MA
NOVEMBER 2014 - JANUARY 2015

- Developed a Swift version of a Teukolsky code and finally benchmarking it for performance in comparison to C code with and without command line options.
- Programming Language: C, Swift.

PROJECT EXPERIENCE

UNIVERSITY OF MASSACHUSETTS DARTMOUTH
PROJECT: THINK AGAIN - A FUN GAME DESIGNED TO HELP SOLVE COMPLEX LOGIC PROBLEMS
TEAM LEADER AND DEVELOPER

NORTH DARTMOUTH, MA
APRIL 2015 - MAY 2015

- My task was to develop the User-Interface of the game with the aim of user friendliness and ease-of-use.
- Programming Languages: JavaScript(CreateJS, visJS), Python, jQuery, Ajax, HTML, CSS.

VIDYALANKAR ONLINE APPLICATION
PROJECT: ONLINE ASSIGNMENT SUBMISSION SYSTEM & ASSESSMENT WITH ANTI-PLAGIARISM
TEAM LEADER AND DEVELOPER

MUMBAI, INDIA
JANUARY 2013 - MARCH 2014

- Online Assignment Submission & Assessment with Anti-Plagiarism is a live project for our college. It would facilitate online assignment submission for students and grading for faculty with copy detection feature to find the plagiarized assignments.
- Programming Languages and Technologies: HTML, CSS, JavaScript, jQuery, vBulletin and MySQL.

ADDITIONAL EXPERIENCE

UNIVERSITY OF MASSACHUSETTS DARTMOUTH
SIGMA XI - RESEARCH EXIBITION
TOPIC: OPENACC - A PARALLEL COMPUTING FRAMEWORK

NORTH DARTMOUTH, MA
APRIL 2015

- Participated at the poster exhibition to present my research to the University and other industry people.

IEEE BOMBAY SECTION
INTERNATIONAL CONFERENCE
TOPIC: IMPLEMENTATION OF ONLINE ASSIGNMENT SUBMISSION WITH FEATURE OF ANTI-PLAGIARISM

MUMBAI, INDIA
APRIL 2014

- Honored with First prize for best paper in Computer Science department.

VIDYALANKAR INSTITUTE OF TECHNOLOGY
INTERN FOR UNIVERSITY WEBSITE

MUMBAI, INDIA
MAY 2012

- Successfully developed and modified the existing Event Management Module making it more useful and optimized.

SKILLS AND INTERESTS

- Languages: Fluent English and French(Beginner Understanding).
- Interests: Travelling, Table Tennis and Music.