



Ravikiran Janardhana

Experience

- 2011–present **Research Assistant**, *University of North Carolina at Chapel Hill*, Chapel Hill.
Worked on identifying fiber crossings in white matter of the brain under *Dr. Martin Styner*
- 2009–2011 **Software Engineer**, *Yahoo! India*, Bangalore.
Developed Facebook, Twitter and LinkedIn modules
- Implemented front-end based instrumentation of My Yahoo! product in order to compute page-views, module-views and click through rates (*CTR*)
- Developed an instrumentation dashboard to showcase daily statistics of views and clicks utilizing Apache Hadoop and Pig for the backend to query the records (*in the order of millions*)
- Demonstrated the quality of a utility player by handling both the frontend as well as the backend tasks which included porting legacy code, improving existing modules and developing new modules

Education

- 2011–present **MS.**, *University of North Carolina at Chapel Hill*, Chapel Hill, NC.
Masters in Computer Science
- 2005–2009 **BE.**, *Peoples Education Society Institute of Technology (PESIT)*, Bangalore, India.
Bachelor of Engineering in Computer Science - 88.40%

Computer skills

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| Super | C/C++, PHP, Javascript |
| Good | Java, Python, Hadoop, Pig |
| Passable | Perl, Shell, HTML5, CSS |
| Platforms | Linux, Web |
| Concepts | Computer Vision, Motion Planning for Robots, Digital Image Processing |

Academic Projects

- 2011 **Roadmap-based Motion Planning in Dynamic Environments.**
Implemented a motion planning algorithm for a point robot to navigate in a dynamic environment consisting of both static and dynamic moving obstacles from start to goal

- 2011 **Identifying fiber crossing landmarks in the white matter of the brain.**
 Designed and Implemented an algorithm to identify fiber crossing landmarks in the white matter using entropy, fiber segments per voxel and fiber orientation dispersion
 The input for the algorithm is a Diffusion Weighted MR Image (DWI) and the output is an image which highlights the fiber crossing landmarks
- 2009 **Track Me - A suite of innovative user interfaces.**
 Track Me is a series of innovative user interfaces whose goal is to help users interact with their PC in a natural manner. It consists of:
 Fintrack ME - Finger Tracking Mouse Emulator
 Talk2me - A speech driven Powerpoint and Windows Media Player assistant
 Point2me - A laser point tracking Powerpoint and Windows Media Player assistant
 This won the best project award in the Department of Computer Science at Prkalpa 2009 organized by PES Institute of Technology
- 2008 – 2009 **American Sign Language Interpreter.**
 Developed a real-time interpreter of American Sign Language alphabets which converts hand gestures into text, which is further read out by a speech engine
 This project resulted in a research paper [1] which was presented at *International MultiConference of Engineers and Computer Scientists 2009, Hong Kong*
 An extension of this work appeared as a book chapter [2] in *Intelligent Automation and Computer Engineering*, Springer, 321-332, 2010

Awards and Achievements

- Mar 2011 **Promoted, Yahoo! India**, Bangalore, India.
 Promoted to Senior Software Engineer
- Jan 2010 **University Gold Medal, Visvesvaraya Technological University**, PESIT, Belgaum, India.
 Awarded Gold Medal for being the University topper in Bachelor of Engineering (B.E) in Computer Science (2005-09)
- Jul 2009 **Certificate of Merit, International MultiConference of Engineers and Computer Scientists 2009**, Hong Kong.
 Awarded Certificate of Merit for the conference paper *Finger Detection for Sign Language Recognition* presented at IMECS 2009, Hong Kong

Interests

Software	Linux and Open Source
Web	HTML5
Sports	Football, Cricket, Basketball
Entertainment	Classical/Electric Guitar, Keyboard, Computer Games and Table Tennis

Publications

- [1] J Ravikiran, Kavi Mahesh, Suhas Mahishi, R Dheeraj, S Sudheender, and Nitin V Pujari. Finger detection for sign language recognition. In *Proceedings of the International MultiConference of*

Engineers and Computer Scientists 2009, volume I, pages 489–493. International MultiConference of Engineers and Computer Scientists, 2009.

- [2] J. Ravikiran, Kavi Mahesh, Suhas Mahishi, R. Dheeraj, S. Sudheender, and Nitin V. Pujari. Automatic recognition of sign language images. In *Intelligent Automation and Computer Engineering*, volume 52 of *Lecture Notes in Electrical Engineering*, pages 321–332. Springer Netherlands, 2010.