

# Ravikiran Janardhana

## Industry Experience

- 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

## Academic 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* ([styner@cs.unc.edu](mailto:styner@cs.unc.edu))
- The main goal of my research is to find the fiber crossing landmarks and use it for registration of human brains
- In particular, this research work will help in registering Krabbe disease infected human brains to normal human brains which in turn helps in the treatment procedure

## 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.  
Percentage: 88.40, **University Topper**

## Computer skills

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|-------------|---|
| Programming | C/C++, PHP, Python, Java, Perl  |
| Web         | HTML5, Javascript, CSS, YUI, jQuery   |
| Data Mining | Pig, Hadoop   |
| Database    | MySQL, Oracle   |
| Platforms   | Linux, Web  |
| Concepts    | Digital Image Processing, Computer Vision, Data Mining, Motion Planning for Robots, Operating Systems, Algorithms and Data Structures |

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## 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 Prakalpa 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

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## 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

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## Interests

- Software Linux and Open Source
- Web/Mobile HTML5, Android and iOS App Development
- Sports Football, Cricket, Basketball
- Entertainment Classical/Electric Guitar, Keyboard, Computer Games and Table Tennis