

AJAY KUMAR Mishra  
*Intelligent Automation, Inc.*  
Rockville, Maryland  
301.294.5263(O) or 240.461.9541(M)  
Email:mishraka@umiacs.umd.edu  
URL:<http://www.umiacs.umd.edu/~mishraka>

---

## Education

- 2011 National University of Singapore, Singapore  
*Doctor of Philosophy (ECE), Feb. 2011*  
*Thesis: A Fixation-Based Segmentation Framework*  
*Advisors: Yiannis Aloimonos (UMD), Cheong L. Fah (NUS)*
- 2003 Indian Institute of Technology, Kanpur, India  
*Bachelor of Technology (ECE), April 2003*

## Work Experience

- Oct 2011- Research Scientist, Intelligent Automation, Inc., Rockville, MD, USA
- 2010–11 Research Associate, University of Maryland, College Park, USA
- 2007–10 Visiting Research Scholar, University of Maryland, College Park, USA
- 2005–07 Research Scholar, National University of Singapore, Singapore
- 2004–05 Associate Design Engineer, STMicroelectronics Pvt. Ltd, Noida, India
- 2003–04 Associate System Engineer, Tata Consultancy Services, Bangalore, India
- 2002–02 Summer Intern, University of Kaiserslautern, Germany

## Publications

- 2012 Ajay K. Mishra, A. Srivastav and Y. Aloimonos, "Segmenting Simple Objects using RGB-D," *IEEE International Conference on Robotics and Automation*, to be presented.
- 2012 Ajay K. Mishra, Y. Aloimonos, C. L. Fah and A. Kassim, "Active Visual Segmentation," *IEEE Transaction on Pattern Analysis and Machine Intelligence (T-PAMI)*, to appear.
- 2011 Ajay K. Mishra, Y. Aloimonos, "Segmentation of Moving Objects Using Cue Intergration," *International Journal on Computer Vision (IJCV)*, under major revision.
- 2011 Ajay K. Mishra, Y. Aloimonos, "Segmentation of Simple Objects Using RGB-D," *IEEE Transaction on Robotics (T-RO)*, under review.
- 2011 Ajay K. Mishra and Y. Aloimonos, "Visual Segmentation of Simple Objects for Robots," in *Robotics Science and Systems VII*.
- 2009 Ajay K. Mishra and Y. Aloimonos, "Active Segmentation," *International Journal on Humanoid Robotics*, Vol 6, 361-386.
- 2009 Ajay K. Mishra, Y. Aloimonos, C. L. Fah, "Active Segmentation With Fixation," in *International Conference on Computer Vision*.
- 2009 Ajay K. Mishra, Y. Aloimonos, C. Fermuller, "Active Segmentation for Robotics," in *International Conference on Intelligent Robots and Systems*.

## Book Chapters

- 2010      Ajay K. Mishra, Y. Aloimonos, "Active Segmentation: A New Approach," in *Computer Vision: From Surfaces to 3D Objects*, Taylor and Francis, edited by Christopher Tyler, 25-51.
- 2009      Ajay K. Mishra, Y. Aloimonos, "Image Segmentation: The View from Inside the Image," in *Pattern Recognition and Machine Vision*, River Publishers, edited by Patrick, S.P. Wang, 165-179.

## Demos

- 2010      "An Active Observer Extracting Objects from a Scene," @ ECCV
- 2010      "Segmentation Engine to Extract Objects on a Table," @ Maryland Robotics Day, UMD

## Major Invited Talks

- 2010      "A Vision System to Extract Simple Objects in a Purely Bottom-Up Fashion," @ NIST, Bethesda, Nov 2010
- 2010      "A New Theory of Image Segmentation," @ Willow Garage, CA, Mar. 2010

## Honors and Awards

- 2008      1st place, Semantic Robot Vision Challenge, @ CVPR in Alaska
- 1990-98    JNV Scholarship, Govt. of India

## Service

Reviewer for CVIU, IEEE-TIP, TVC, IVC, IEEE-Multimedia.

Member, Organizing Committee, Semantic Robot Vision Challenge 2009

## References

Available on request