

# M. Hidayath Ansari

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PhD Candidate  
Department of Computer Sciences  
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## RESEARCH INTERESTS

Machine Learning, Neuroimaging, Clustering, Data Analysis

## EDUCATION

### University of Wisconsin-Madison

PhD in Computer Sciences (Statistics Minor)  
Advisor: Prof. Michael Coen  
2008-2014 (*expected*)

### University of Wisconsin-Madison

M.S. in Computer Sciences  
2007-2009

### Indian Institute of Technology, Bombay

B. Tech in Computer Science and Engineering  
2003-2007

## EXPERIENCE/ INTERNSHIPS

### University of Wisconsin-Madison

Laboratory for Optical and Computational Instrumentation  
Research Assistant (2007-2008)  
Worked on WiscScan and development of flow cytometry software

### Amazon.com Inc.

Hyderabad, India  
Transportation Group (May-July 2007)

### University of Waterloo

Databases Group  
Waterloo, ON, Canada (May-July 2006)

## PUBLICATIONS

**M. Hidayath Ansari**, M. H. Coen, B. B. Bendlin. Linking White Matter Structural Evolution to Alzheimer's Disease Risk and Cognitive Function using Machine Learning. *NeuroImage*, 2014. (*in submission*)

M. H. Coen, **M. Hidayath Ansari**, B. B. Bendlin. Predicting Short-Term Cognitive Change from Longitudinal Neuroimaging Analysis. In *Proceedings of NIPS-2013 workshop on Machine Learning and Interpretation in Neuroimaging (MLINI-13)*, Lake Tahoe, Nevada, USA, 2013. (*to appear*)

**M. Hidayath Ansari**, M. H. Coen, B. B. Bendlin, and M. A. Sager. Using In-Situ Statistics and a Spatially-Aware Kernel for Longitudinal Neuroimaging Analysis. *Technical Report TR1796, University of Wisconsin-Madison*, 2013.

M. H. Coen, **M. Hidayath Ansari**, M. Phillips, and T. S. Chang. Goodness-of-fit testing via optimization. In *ORS 2012: Proceedings of the 2nd Annual International Conference on Operations Research and Statistics*, Bali, Indonesia, 2012.

**M. Hidayath Ansari**, W. Huang, and M. H. Coen. Automated Determination of Gleason Grades in Prostate Biopsy Images. In *Proceedings of Statistical, Computational and Visualization Methods in Medical Informatics (SCVMMI'11)*, Dubuque, USA, 2011.

M. H. Coen, **M. Hidayath Ansari** and N. Fillmore. Learning from Spatial Overlap. *In Proceedings of the Twenty-Fifth AAAI Conference on Artificial Intelligence (AAAI-11)*, San Francisco, CA, 2011.

**M. Hidayath Ansari**, N. Fillmore, M. H. Coen. Incorporating Spatial Similarity into Ensemble Clustering. *In Proceedings of MultiClust: Discovering, Summarizing, and Using Multiple Clusterings: International Conference on Knowledge Discovery and Data Mining (KDD)*, Washington D.C., 2010.

M. H. Coen, **M. Hidayath Ansari** and N. Fillmore. Measuring Similarity Non-Metrically. *In Proceedings of the Joint ICML/COLT Workshop on Learning in Non-geometric Spaces*, Haifa, Israel, 2010.

M. H. Coen, **M. Hidayath Ansari** and N. Fillmore. Comparing Clusterings in Space. *In International Conference on Machine Learning (ICML)*, Haifa, Israel, 2010.

E. Landsness, D. Crupi, B. K. Hulse, M. J. Peterson, R. Huber, **Hidayath Ansari**, M. Coen, C. Cirelli, R. M. Benca, M. F. Ghilardi, G. Tononi. Sleep-dependent improvement in visuo-motor learning: a causal role for slow waves. *In Journal of Sleep* 32:1273-1284, 2009.

D. Buschke, J. Squirrell, **M. Hidayath Ansari**, et al. Multiphoton Flow Cytometry to Assess Intrinsic and Extrinsic Fluorescence in Cellular Aggregates: Applications to Stem Cells. *In Microscopy and Microanalysis* 17 (2010): 540-554.

## TECHNICAL SKILLS

**Languages:** C/C++, Python, MATLAB, R, Java, Scheme

**Scripting/Typesetting:** LaTeX, Awk, Sed, Bash

**Operating Systems:** Linux (Ubuntu, RHEL, Fedora), Windows

**Web:** Apache, PHP, MySQL, Solr, HTML/CSS/Javascript

## HONORS

- Student Scholarship, AAAI 2011
- Merit Scholarship, IIT Bombay, 2003-2007
- Ranked 49th nationwide in IIT Joint Entrance Examination 2003, India
- National Talent Scholar, India

## SELECTED COURSES

- Machine Learning, Advanced Artificial Intelligence, Advanced Bioinformatics, Statistical Foundations of Machine Learning
- Advanced Algorithms, Advanced Natural Language Processing, Advanced Networks
- Mathematical Statistics, Statistical Inference, Statistical Computing

## TALKS

- "Finding Patterns of White Matter Change using Spatial Computing." Wisconsin Alzheimer's Disease Research Center, Madison, WI. April 2013.
- "Incorporating Spatial Information in Ensemble Clustering." MultiClust KDD, Washington D.C., July 2010.