Nathanael Fillmore

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Education

University of Wisconsin, Madison, Ph.D., Computer Sciences, 2010–2014 (expected).

Title: Statistical Models for RNA Assembly and Analysis.

Co-advisors:

Colin Dewey (Biostatistics and Medical Informatics; Computer Sciences).
Michael Newton (Statistics; Biostatistics and Medical Informatics).

Minor: Mathematics.

University of Wisconsin, Madison, M.S., Computer Sciences, 2008–2010.

American Institute of Indian Studies, Pune, India, Advanced Language Program in Sanskrit, June–November, 2005.

Carleton College, B.A., Philosophy and Classical Languages, *magna cum laude*, 2001–2005.

Honors, Awards, and Fellowships

Computation and Informatics in Biology and Medicine Traineeship (full support), 2011–2014.

Student travel scholarship, International Conference on Machine Learning, 2010.

Full tuition waiver, American Institute of Indian Studies, 2005.

Phi Beta Kappa, 2005.

White Bear Lake Area Educational Foundation Brosious Scholarship, 2001–2005.

Byrd Scholarship, 2001–2005.

American Legion Scholarship, 2001.

Kopp Family Foundation Scholarship, 2001.

Citizen's Scholarship Foundation of America, 2001.

Peer-Reviewed Publications

Michael H. Coen, M. Hidayath Ansari, and **Nathanael Fillmore**. Learning from spatial overlap. *Twenty-Fifth Conference on Artificial Intelligence (AAAI)*, 2011.

Michael H. Coen, M. Hidayath Ansari, and **Nathanael Fillmore**. Comparing clusterings in space. *International Conference on Machine learning (ICML)*, 2010.

Andrew B. Goldberg, **Nathanael Fillmore**, David Andrzejewski, Zhiting Xu, Bryan Gibson, and Xiaojin Zhu. May all your wishes come true: A study of wishes and how to recognize them. In *North American Chapter of the Association for Computational Linguistics – Human Language Technologies (NAACL-HLT)*, 2009.

Technical Reports

Nathanael Fillmore, Andrew B. Goldberg, and Xiaojin Zhu. Document recovery from bag-of-word indices. University of Wisconsin, Computer Sciences, Technical Report TR1645, August 2008.

Invited Presentations

"Evaluation of *de novo* transcriptome assemblies from RNA-Seq data." Presentation to the Computation and Informatics in Biology and Medicine seminar, University of Wisconsin, Madison. February 12, 2013.

"Progression and gene expression in cervical cancer." Presentation to the Computation and Informatics in Biology and Medicine seminar, University of Wisconsin, Madison. October 25, 2011.

"Towards a comprehensive corpus of eighteenth-century English print." Presentation to the Mellon working group on Visualizing English Print from c. 1470 to 1800, University of Wisconsin, Madison. October 1, 2011.

"Incorporating spatial similarity into ensemble clustering." Presentation at MultiClustKDD: 1st International Workshop on Discovering, Summarizing and Using Multiple Clusterings, part of the

16th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, Washington, DC, 2010. (With M. Hidayath Ansari (speaker) and Michael H. Coen.)

Invited Posters

"Evaluation of *de novo* transcriptome assemblies from RNA-Seq data." Poster at the National Library of Medicine Informatics Training Conference, Salt Lake City, Utah. June 19, 2013.

"RSEM-EVAL: A probabilistic transcriptome assembly evaluator." Poster at the International Conference on Intelligent Systems for Molecular Biology, Long Beach, CA. July 15-17, 2012.

"Measuring similarity non-metrically." Poster at the ICML 2010 Workshop on Learning in Non-(geo)metric Spaces, part of the International Conference on Machine Learning, Haifa, Israel, 2010.

Contributed Posters

"Probability models for RNA assembly and analysis." Poster at the Computation and Informatics in Biology and Medicine annual fall retreat, University of Wisconsin, Madison. October 11, 2013.

"Probability models for RNA assembly and analysis." Poster at the Computation and Informatics in Biology and Medicine annual fall retreat, University of Wisconsin, Madison. October 12, 2012.

"Progression and gene expression in cervical cancer." Poster at the annual program year workshop on Large Data Sets in Medical Informatics, Institute for Mathematics and its Applications, University of Minnesota, November 15, 2011.

"Progression and gene expression in cervical cancer." Poster at the Computation and Informatics in Biology and Medicine annual fall retreat, University of Wisconsin, Madison. October 7, 2011.

Academic Service

Local site coordinator (with Xiaojin Zhu and Benjamin Snyder), North American Computational Linguistics Olympiad (NACLO), 2011.

Local site coordinator (with Xiaojin Zhu), North American Computational Linguistics Olympiad (NACLO), 2010.

Local site coordinator (with Xiaojin Zhu), North American Computational Linguistics Olympiad (NACLO), 2009.

Teaching Assistantships

CS 513, Numerical Linear Algebra, Spring 2011.

CS 412, Intro. to Numerical Methods, Spring 2011.

CS 760, Machine Learning, Fall 2010.

CS 412, Intro. to Numerical Methods, Fall 2010.

CS 540, Intro. to Artificial Intelligence, Spring 2010.

CS 412, Intro. to Numerical Methods, Spring 2010.

CS 838, Computational Cognitive Science, Fall 2009.

CS 412, Intro. to Numerical Methods, Fall 2009.

CS 540, Intro. to Artificial Intelligence, Spring 2009.

CS 310, Problem Solving with Computers, Fall 2008.

Latin 101, Beginning Latin, Winter 2005 (Carleton College).

Non-Academic Employment

BigHat Inc., Madison, WI, July 2006–May 2008. Technical lead, with a substantial equity stake.

Web Services Group, Carleton College. September 2002–June 2005 (part-time), and as an independent contractor in 2005–2006. Programmer.