

William Michael Landau

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<http://www.will-landau.com/>
<http://github.com/wlandau/>

Education

PhD, Statistics

Expected May 2016

- Iowa State University, Ames, IA

MS, Statistics

May 2013

- Iowa State University, Ames, IA
- Creative component: **W. M. Landau** and P. Liu. Dispersion Estimation and its Effect on Test Performance in RNA-seq Data Analysis: A Simulation-Based Comparison of Methods. *PLOS One*, 8(12). December 2013.

BS, Statistics

June 2011

- University of Chicago, Chicago, IL

Articles

- **W. M. Landau** and P. Liu. Dispersion Estimation and its Effect on Test Performance in RNA-seq Data Analysis: A Simulation-Based Comparison of Methods. *PLOS One*, 8(12). December 2013.
- B. J. Ratliff, Womack. C. C., X. N. Tang, **W. M. Landau**, L. J. Butler, and D. E. Szpunar. Modeling the Rovibrationally Excited C₂H₄OH Radicals from the Photodissociation of 2-Bromoethanol at 193nm. *Journal of Physical Chemistry*, 114(14): 493445, April 2010.

Posters

- **W. M. Landau** and J. Niemi. A Fully Bayesian Hierarchical Modeling Strategy for Identifying Gene Expression Heterosis using Parallel Computing with Graphics Processing Units (GPUs). Conference on Applied Statistics in Agriculture, Kansas State University, 2015. (Similar poster presented at the Joint Statistical Meetings in Boston, MA in 2014.)
- **W. M. Landau** and P. Liu. Dispersion Estimation and its Effect on Test Performance in RNA-seq Data Analysis. Joint Statistical Meetings, 2013. Montreal, QC, Canada.

Employment

Research Assistant

June 2013 – present

- NIH grant number R01GM109458.
- Jointly formulated a hierarchical model to data from gene experiments

studying hybrid vigor.

- Fit the model with a Markov Chain Monte Carlo procedure, accelerated with parallel computing and graphics processing units (GPUs).

Lecturer
GPU Computing Seminar Series

August 2013 – December 2013
August 2012 – December 2012

- Constructed a high-performance computing seminar series publicly accessible at <http://will-landau.com/gpu/>

Course Instructor
STAT 305: Engineering Statistics

January 2013 – May 2013
January 2012 – May 2012

Teaching Assistant
STAT 231: Engineering Probability
STAT 105: Introduction to Engineering Statistics

August 2011 – December 2011

Leadership

Preparing Future Faculty Fellow
Preparing Future Faculty Program

August 2013 – June 2014

- Completed supplemental training courses in teaching, research writing, and applying for academic positions.

Assistant Coach
Iowa State University Boxing Club

August 2012 – December 2013

- Led and jointly planned beginner boxing classes of roughly seventy participants.
- Individually coached beginner and competitive college boxers.
- Cornerman in local fights in Davenport and Cedar Rapids, IA, in 2013.
- Created improved membership and financial bookkeeping systems.

Volunteer Instructor
Investigation Series
Office of Precollegiate Programs for Talented and Gifted (OPPTAG)

March 13, 2014

Created and led an educational game simulating the Monty Hall problem for middle school students in the community of Ames, IA

Computer Languages

Programming

- Significant experience with R, C/C++, CUDA C/C++, shell scripting,

Python.

- Some experience with SAS, SQL, AWK, Haskell, JavaScript, Fortran.

Markup

- Significant experience with LaTeX, knitr, HTML, CSS.
- Some experience with Markdown, RMarkdown, XML.

References

Jarad Niemi

Assistant Professor

- PhD major professor at Iowa State University.
- niemi@iastate.edu

Peng Liu

Associate Professor

- MS major professor at Iowa State University.
- pliu@iastate.edu
- 515-294-7806

Additional references available on request