|  |  |  |
| --- | --- | --- |
|  |  | William Michael Landau  3211 Snedecor Hall  Iowa State University  Ames, IA 50011  201-563-4325  [landau@iastatel.edu](mailto:landau@iastatel.edu)  <http://www.will-landau.com/>  <http://github.com/wlandau/> |
|  |  |  |
| Objective |  | * Develop computational Bayesian methods and applications to next-generation gene sequencing technologies. * Instruct students using cutting edge pedagogical methods. * Make an impact through outreach and service. |
|  |  |  |
| Education |  | PhD, Statistics Expected May 2016  * Iowa State University, Ames, IA * Cumulative GPA: 3.87/4.00  MS, Statistics May 2013  * Iowa State University, Ames, IA * Cumulative GPA: 3.90/4.00 * [Creative component](http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0081415): **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 * Cumulative GPA: 3.69/4.00 |
|  |  |  |
| Research |  | Research Assistant June 2013 – present  * 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).  Masters Degree Student June 2011 – Jun 2013  * Wrote a [creative component](http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0081415) to compare popular gene sequencing data analysis methods. * Created and presented a [poster](http://will-landau.com/research/jsm2013.pdf) of the same work at the 2013 Joint Statistical Meetings in Montreal, Canada. |

|  |  |  |
| --- | --- | --- |
| Teaching |  | Lecturer August 2013 – December 2013 GPU Computing Seminar Series August 2012 – December 2012   * Created and delivered weekly talks on statistical computing with graphics processing units (GPUs) to graduate students and faculty at Iowa State University. * Compiled all notes, example code, and lecture videos into a publicly available resource, <http://will-landau.com/gpu/>.  Course Instructor January 2013 – May 2013STAT 305: Engineering Statistics January 2012 – May 2012  * Planned and delivered biweekly lectures to classes of sixty students * Designed homework, tests, and solutions to each. * Proctored and graded exams. * Held two office hours per week.  Teaching Assistant August 2011 – December 2011STAT 231: Engineering ProbabilitySTAT 105: Introduction to Engineering Statistics  * Wrote homework solutions. * Graded homework. * Held two office hours per week. |
|  |  |  |
| Leadership |  | Preparing Future Faculty Program August 2013 – present  * Completed supplemental training courses in teaching, research writing, and applying for academic positions.  Assistant Coach August 2012 – December 2013Iowa State University Boxing Club  * 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.  Guest Lecturer March 13, 2014Investigation Series Office of Precollegiate Programs for Talented and Gifted (OPPTAG)   * Created and led an educational game simulating the Monty Hall problem. * Students learned to identify the source of randomness in a chance situation. * Two classes of roughly thirty students from the surrounding community. |

|  |  |  |
| --- | --- | --- |
| Publications |  | * **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 P. Liu. Dispersion Estimation and its Effect on Test Performance in RNA-seq Data Analysis. Joint Statistical Meetings, 2013. Montreal, QC, Canada. |
|  |  |  |
| **Computer Languages** |  | Programming June 2011  * Significant experience with R, C/C++, CUDA C/C++, Bash, Python. * Moderate experience with SAS, SQL, AWK, Haskell, JavaScript, Fortran.  Markup June 2011  * Significant experience with LaTeX, knitr, HTML, CSS. * Moderate experience with Markdown, RMarkdown, XML. |
|  |  |  |
| References |  | Jarad NiemiAssistant Professor  * PhD major professor at Iowa State University. * [niemi@iastate.edu](mailto:niemi@iastate.edu)  Peng LiuAssociate Professor  * MS major professor at Iowa State University. * [pliu@iastate.edu](mailto:pliu@iastate.edu) * 515-294-7806   Additional references available on request. |