

## Andrew D. Thrasher

---

CONTACT INFORMATION	Department of Computer Science and Engineering The University of Notre Dame 211 Cushing Hall Notre Dame, IN 46556 USA	<i>E-mail:</i> athrash1@nd.edu
SECURITY CLEARANCE	Information available on request	
CITIZENSHIP	USA	
RESEARCH INTERESTS	Bioinformatics, Next-generation Sequence Assembly, Bacterial Genetics/Phylogenetics, Scalable Computing, and Workflows	
EDUCATION	<b>The University of Notre Dame</b> , Notre Dame, Indiana USA Computer Science and Engineering <b>Anderson University</b> , Anderson, Indiana USA B.A., Computer Science, Mathematics and Physics, May 2009 <ul style="list-style-type: none"><li>• With Honors in Computer Science</li></ul>	
ACADEMIC EXPERIENCE	<b>The University of Notre Dame</b> , Notre Dame, Indiana USA <i>Graduate Student</i> <b>July 2009 to present</b> <ul style="list-style-type: none"><li>• Member of the Notre Dame Bioinformatics Lab</li><li>• Primary research in the area of scalable bioinformatics solutions</li></ul> <i>Teaching Assistant</i> <b>Fall 2009</b> <ul style="list-style-type: none"><li>• Assisted Discrete Mathematics</li><li>• Conducted problem sessions for second-year computer science students</li><li>• Hed weekly office hours to assist students</li><li>• Graded weekly assignments</li></ul> <i>Teaching Assistant</i> <b>Spring 2011</b> <ul style="list-style-type: none"><li>• Assisted Fundamentals of Computing II</li><li>• Supervised laboratory sessions for second-year computer science students</li><li>• Hed weekly office hours to assist students</li><li>• Graded weekly assignments</li></ul> <b>Anderson University</b> , Anderson, Indiana USA <i>Undergraduate Student</i> <b>September 2005 to May 2009</b> <i>Teaching Assistant</i> <b>August 2006 to May 2008</b> <ul style="list-style-type: none"><li>• Assisted Astronomy and General Physics</li><li>• Conducted laboratory sessions</li><li>• Graded weekly assignments</li></ul>	

PUBLICATIONS Karine Megy, Scott J Emrich, Daniel Lawson, David Campbell, Emmanuel Dialynas, Daniel ST Hughes, Gautier Koscielny, Christos Louis, Robert M MacCallum, Seth N Redmond, Andrew Sheehan, Pantelis Topalis, Derek Wilson and the VectorBase Consortium, VectorBase: improvements to a bioinformatics resource for invertebrate vector genomics, Nucleic Acids Research, In Press

Peter Bui, Li Yu, Andrew Thrasher, Rory Carmichael, Irena Lanc, and Douglas Thain, Scripting distributed scientific workflows using Weaver, Concurrency and Computation: Practice and Experience, In Press

Li Yu, Christopher Moretti, Andrew Thrasher, Scott Emrich, Kenneth Judd, and Douglas Thain, Harnessing Parallelism in Multicore Clusters with the All-Pairs, Wavefront, and Makeflow Abstractions, Journal of Cluster Computing, September, 2010.

CONFERENCE POSTERS Andrew Thrasher, Irena Lanc, Douglas Thain, and Scott Emrich, Makeflow for Bioinformatics, 2010 International conference on Intelligent Systems for Microbiology, Boston, MA.

CONFERENCE PUBLICATIONS Andrew Thrasher, Zachary Musgrave, Douglas Thain and Scott Emrich, Shifting the Bioinformatics Computing Paradigm: A Case Study using Genome Annotation, 2nd IEEE International Conference on Computational Advances in Bio and Medical Sciences (ICCBS), 2012

Andrew Thrasher, Rory Carmichael, Peter Bui, Li Yu, Douglas Thain, and Scott Emrich, Taming Complex Bioinformatics Workflows with Weaver, Makeflow, and Starch, 5th Workshop of Workflows in Support of Large-Scale Science, at Supercomputing 2010

TECHNICAL SKILLS Programming: Perl, C, C#.NET, VB.NET, PHP, UNIX shell scripting, SQL, and others

Applications: L<sup>A</sup>T<sub>E</sub>X, B<sub>I</sub>B<sub>T</sub>E<sub>X</sub>, Microsoft Office, Celera assembler, SSAHA, BLAST, SHRiMP, Bowtie, BWA and other common bioinformatics tools