

Jason A. Pell

2228A BPS Building
Michigan State University
East Lansing, MI 48824
Citizenship: United States

Cell: (517) 512-0239
Email: jason.pell@gmail.com

Education

Ph.D. Computer Science & Quantitative Biology, Michigan State University, 2009 - present.

Expected Graduation: Spring 2013

GPA: 3.86

Advisor: C. Titus Brown

B.A. Computer Science, Grand Valley State University, 2005 - 2009.

Minor: Mathematics

GPA: 3.75

Major GPA: 3.9

Employment

Research Assistant, Michigan State University, January 2010 - present.

Teaching Assistant, Michigan State University, August 2009 - December 2009.

Software Engineering Intern, Industrial Service Technology, May 2006 - July 2009.

Research

Journal Publications

Pell, J., Hintze, A., Canino-Koning R., Howe, A., Tiedje, J.M. and Brown, C.T. Scaling metagenome sequence assembly with probabilistic de Bruijn graphs. *Proc. Natl. Acad. Sci. U.S.A.* 109(33):13272-7. (2012)

Presentations

Talk: Digital Normalization of Metagenomic DNA Sequence Data. From Data to Knowledge: Machine-Learning with Real-time and Streaming Applications Conference at UC Berkeley. May 2012.

Talk: Graph compression approaches in assembly. IEEE International Conference on Computational Advances in Bio and medical Sciences in Las Vegas, NV. February 2012.

Poster: Scaling de novo assembly by pre-filtering reads on graph structure. Genome Informatics Conference at Cold Spring Harbor Laboratory. November 2011.

Poster: Assembly of soil metagenomes: Breaking down big data. Argonne Soil Metagenomics Workshop. October 2010.

Teaching

CSE 231: Introduction to Programming I, Fall 2009.

I was a TA for two sections of the introductory programming class at MSU. I graded projects, taught lab sessions each week, and held frequent help room hours.

QB 826: Introduction to Quantitative Biology Techniques, Summer 2010.

I co-taught a module for the course where students gained experience in assembling a bacterial genome using Amazon's EC2 cloud computing infrastructure.

Workshop on Next-Generation Sequencing, Summer 2010 & 2011.

I was a TA for my advisor's two-week, intensive workshop aimed at teaching biologists methods for dealing with next-generation sequencing data using Amazon EC2.

Software Carpentry Workshop, April 2012.

I co-taught a two-day workshop aimed at teaching scientists basic UNIX command-line, introductory Python, version control, and SQL.

Awards & Fellowships

Award for Excellence Scholarship, Grand Valley State University, August 2005 - April 2009.

Dean's List (6 times), Grand Valley State University, January 2006 - April 2009.

School of CIS Academic Scholarship, Grand Valley State University, 2007.

Outstanding Senior in CS, Grand Valley State University, 2008.

Quantitative Biology Initiative Recruiting Fellowship, Michigan State University, 2009.

CUMREC Fellowship, Michigan State University, 2009.

Miscellaneous

Computer Skills

C, C++, Python, Perl, Java, .NET, C#, Visual Basic, git, Maple, Matlab, SQL, L^AT_EX.