Lucia Williams

Montana State University
Department of Computer Science
357 Barnard Hall
Montana State University
Bozeman, Montana 59717

Email: lgw2@uw.edu
Website: `https://lgw2.github.io/`
Phone: +1 (206) 786-7351

Education

Montana State University
Ph.D., Computer Science, 2017-present
Advisor: Brendan Mumey

University of Washington
B.S., Applied Computational and Mathematical Sciences, 2014
B.A., Community, Environment, and Planning, 2014
Minor: Mathematics

Work

Research Assistant
Biofilm Resource and Information Database (BRaID), 2017-present

Instructor
Montana State University
The Joy & Beauty of Data (introduces programming with Python), summer 2019 and 2020
Programming with C, summer 2021

Data Scientist
Marchex (online advertising company), 2014-2017

Data Visualization Intern
Mazama Science (data visualization consulting company), 2013

REU Student
Montana State University, summer 2013
Project: An integer linear programming solution to the collaborative group provisioning problem.

Grader
University of Washington, 2012-2014
Courses: Real Analysis, Linear Algebra, Multivariable Calculus, Discrete Mathematical Modeling

Publications

Lucia Williams, Alexandru I. Tomescu, Brendan Mumey.
Flow Decomposition with Subpath Constraints.
21st International Workshop on Algorithms in Bioinformatics (WABI). 2021

Lucia Williams, Brendan Mumey.
Maximal Perfect Haplotype Blocks with Wildcards.
iScience, vol 101149. 2020.
DOI: https://doi.org/10.1016/j.isci.2020.101149

Lucia Williams, Brendan Mumey.
Extending Maximal Perfect Haplotype Blocks to the Realm of Pangenomics.
Algorithms for Computational Biology (AlCoB).
Lecture Notes in Computer Science, vol 12099. 2020.

Robin Lynne Belton, Brittany Terese Fasy, Rostik Mertz, Samuel Micka, David L. Millman, Daniel Salinas, Anna Schenfisch, Jordan Schupbach, Lucia Williams.
Reconstructing Embedded Graphs from Persistence Diagrams.
Computational Geometry, 2020.

Lucia Williams, Gillian Reynolds, Brendan Mumey.
RNA Transcript Assembly Using Inexact Flows.
IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 2019.

Posters

Decomposing inexact flows with application to RNA transcript assembly.
Research in Computational Molecular Biology (RECOMB), May 2019, Washington, D.C.

Awards and Fellowships

Outstanding PhD Researcher Award
Montana State University Computer Science Department, 2020-2021

Benjamin Fellowship
Montana State University College of Engineering, 2017-2018

Travel & Conference Awards
Gianforte School of Computing award to attend the Tapia Celebration of Diversity in Computing, fall 2020
MSU Graduate School Professional Advancement Grant, spring 2020
Montana INBRE Competitive Student Travel Award, spring 2019

Workshops

Computing Research Association Grad Cohort for Women
San Francisco, 2018
Chicago, 2019

Service

Conference Volunteer
Research in Computational Molecular Biology (RECOMB), spring 2019

Co-organizer
Montana State University Department of Computer Science prospective student visit day, spring 2019 and 2020
Montana State University Department of Computer Science new graduate student orientation, fall 2020

References

Dr. Brendan Mumey
Computer Science
Montana State University
brendan.mumey@montana.edu
+1 (406) 994-7811

Dr. David Millman
Computer Science
Montana State University
david.millman@montana.edu
+1 (406) 994-4261