Lucia Williams

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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

Programming with C, summer 2021

The Joy & Beauty of Data (introduces programming with Python), summer 2019 and 2020

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

Outstanding PhD Researcher Award

Fellowships 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

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