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

### 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, Brendan Mumey.

Maximal Perfect Haplotype Blocks with Wildcards.

iScience, vol 101149. 2020.

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.

2019 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

## Benjamin Fellowship

# Fellowships

Montana State University College of Engineering, 2017-2018

#### Travel Awards

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