

# David Merrell

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Madison, WI

dpmerrell.github.io

## Education

### PhD Computer Science

Sep 2016 - Present

University of Wisconsin – Madison

Current PhD student interested in AI, machine learning, and optimization.

Research:

Weighted Model Integration (research assistant)

*Aws Albarghouthi, Loris D'Antoni*

Deep Learning on Transcriptome Data

*David Page, Ron Stewart*

Coursework:

CS 524 (Intro to Optimization)

AB

CS 540 (Intro to AI)

A

CS 761 (Machine Learning Theory)

A

CS 704 (Principles of Programming Languages)

A

CS 703 (Program Verification and Synthesis)

A

CS 577 (Intro to Algorithms)

A

CS 760 (Machine Learning)

A

CS 726 (Nonlinear Optimization)

BC

### BS Mathematics, cum laude

Apr 2014

Brigham Young University—Physics Minor—GPA 3.9

Coursework: Real analysis, matrix analysis/linear algebra, probability, numerical methods, ODEs, PDEs, complex analysis, computational physics, quantum mechanics, classical mechanics, abstract algebra.

## Peer-Reviewed Publications

David Merrell, Aws Albarghouthi, Loris D'Antoni. *Weighted Model Integration with Orthogonal Transformations*. IJCAI 2017.

## Work Experience

### RAND Corporation

Sep 2014 - Mar 2016

Full Time Research Assistantship. I built software for operations research projects.

### Sandia National Laboratories

Summer 2013; Summer 2014

Two internships. I developed heterogeneous material representations for the ALEGRA shock/MHD finite element code.

### Pacific Northwest National Laboratory

Summer 2012

Internship. I characterized the performance of a computer vision algorithm.

## Technical Skills

Python

C++

MATLAB

Git

Linux

bash

R

L<sup>A</sup>T<sub>E</sub>X

Mathematica

## Service

### **Student ACM (SACM)—*Social Chair***

Sep 2017—Aug 2018

Planned and publicized events for the Madison student chapter of the Association for Computing Machinery.

### **Wisconsin Welcome Weekend 2018—*Co-Chair***

Spring 2018

Co-chaired a committee of 10 student volunteers. We organized a weekend of activities for prospective CS graduate students visiting Madison.

### **Student ACM (SACM)—*President***

Aug 2018—present

I lead a group of 20 volunteers. We organize activities for CS graduate students. I recruit volunteers, give them responsibilities, and Manage By Walking Around (MBWA).