

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^AT_EX

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 serve the Madison student chapter of the Association for Computing Machinery. We organize activities that benefit the CS graduate student community.