

Micah Darrell, PhD

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EDUCATION

Northwestern University, Evanston, IL, 2019-2023

Ph.D Mathematics

- Thesis: *Topological Restriction Homology is Locally Even in Characteristic p*

University of Illinois at Chicago, Chicago, IL, 2017-2019

Graduate Student

- NSF RTG Fellow

University of Cincinnati, Cincinnati, OH 2014-2017

B.S. Mathematics

- Harris Hancock Scholarship Recipient

RESEARCH EXPERIENCE

Topological Restriction Homology is Locally Even in Characteristic p

Single Author

In Progress

- Resolves a question originating from one of the most important math papers in recent years
- In preparations for being published in a major mathematics research journal

Carrara

Joint w/ many mathematicians

In Progress

- Developing a new open source computer algebra system, written in Rust
- Expected to give provably accurate calculations of previously unknown algebraic K-theory groups

PROFESSIONAL EXPERIENCE

University of Illinois at Chicago, Chicago, IL, 2018-2019

Teaching Assistant

- Designed course materials for a senior level algorithms and data structures course and a machine learning course
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Elder Research Inc., Washington D.C., 2015-2016

Junior Data Scientist

- Collaborated with a team of 5 to design a fraud-detection model for a national government agency
- Independently responsible for network analysis component
- Hired on after internship ended

TECHNICAL SKILLS

Python (PyTorch, scikit-learn, matplotlib), R, Rust, SQL, Algebraic Topology and TDA