

David Moon *Curriculum Vitae*

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Education

- 2019- PhD Candidate, Computer Science • University of Michigan
Advisor: [Cyrus Omar](#)
- 2018-19 PhD Student, Computer Science • University of Colorado Boulder
Transferred to Michigan
- 2011-16 BA, Mathematics & Computer Science • Williams College
Thesis: [Specifying & Enforcing Synchronization Disciplines in Multithreaded Programs](#)
Advisor: [Stephen Freund](#)

Publications

- 2022 [tylr: A Tiny Tile-Based Structure Editor](#) • [TyDe](#)
[David Moon](#), Andrew Blinn, Cyrus Omar
- 2022 [An Integrative Human-Centered Architecture for Interactive Programming Assistants](#) • [VL/HCC](#)
Andrew Blinn, [David Moon](#), Eric Griffis, Cyrus Omar
- 2021 [Filling Typed Holes with Live GUIs](#) • [PLDI](#)
Cyrus Omar, [David Moon](#), Andrew Blinn, Ian Voysey, Nick Collins, Ravi Chugh
- 2015 [Sets Characterized by Missing Sums and Differences in Dilating Polytopes](#) • [JNT](#)
Thao Do, Archit Kulkarni*, Steven J Miller [David Moon](#)*, Jake Wellens, James Wilcox
* joint lead authors (authors listed alphabetically by last name)
- 2015 [Sums and Differences of Random Correlated Sets](#) • [JNT](#)
Thao Do, Archit Kulkarni, Steven J Miller, [David Moon](#), Jake Wellens
- 2014 [Generalizing Zeckendorf's Theorem to f-decompositions](#) • [JNT](#)
Philippe Demontigny, Thao Do, Archit Kulkarni, Steven J Miller, [David Moon](#), Umang Varma

Honors

- 2020 NSF GRFP Honorable Mention
- 2018 Outstanding PhD Teaching Award • University of Colorado Boulder
- 2007-11 Caroline D Bradley Scholar

Talks

- 2022 **tylr: A Tiny Tile-Based Structure Editor • UPenn**
Invited guest lecture for [Andrew Head](#)'s graduate seminar [Live and Literate Programming](#). To be given at the end of November.
- 2022 **tylr: A Tiny Tile-Based Structure Editor • TyDe**
- 2021 **Restructuring Structure Editing • LIVE**
- 2019 **Naturally Editing Typed Expressions with Holes • Midwest PL Summit**
Joint presentation with Cyrus Omar
- 2019 **Flexible Structure Editing of Well-Typed Expressions • TyDe**
- 2013 **Sets Characterized by Missing Sums and Differences in Z^D • YMC**

Teaching

University of Michigan

- 2022 EECS 490: Programming Languages (TA)
- 2020 EECS 490: Programming Languages (TA)

University of Colorado Boulder

- 2018 CSCI 3155: Principles of Programming Languages (TA)

City College of New York

- 2018 CSC 59940: Front-End Web Application Development (co-instructor)

Williams College

- 2015 MATH 394: Galois Theory (grader)
- 2015 CSCI 136: Data Structures (grader)
- 2012 MATH 200: Discrete Mathematics (grader)

Service

- 2020-22 Program Committee • [LIVE](#)
- 2021 Artifact Evaluation Committee • [PLDI](#)

Industry

- 2016-18 **Software Engineer • Addepar**
Web application development using Ember.js and Java.
Developed interfaces for benchmarking investment portfolios.