Thomas Cohn

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EDUCATION	**Massachusetts Institute of Technology, Cambridge, USA**	2022 - Present

Computer Science PhD Program
Advisor: Russ Tedrake

University of Michigan, Ann Arbor, USA   2017 - 2022
College of Engineering: Computer Science BSE with Honors, Magna cum Laude
College of LSA: Honors Mathematics BS
Minors: Statistics, Music
GPA: 3.74/4.00

RESEARCH

Articles

- **Thomas Cohn**, Mark Petersen, Max Simchowitz, Russ Tedrake, "Non-Euclidean Motion Planning with Graphs of Geodesically-Convex Sets," *Proceedings of Robotics: Science and Systems (RSS)*, 2023. - **Best Paper Finalist**

- **Thomas Cohn**, Nikhil Devraj, Odest Chadwicke Jenkins, "Topologically-Informed Atlas Learning," *Proceedings of the 2022 IEEE International Conference on Robotics and Automation (ICRA)*.

- **Thomas Cohn**, Odest Chadwicke Jenkins, Karthik Desingh, Zhen Zeng, "TSBP: Tangent Space Belief Propagation for Manifold Learning," *Robotics and Automation: Letters*, 2020.

Additional Presentations

- "Topologically-Informed Atlas Learning," *University of Michigan Engineering Research Symposium Fall 2021.* (Poster Presentation) - **1st Place Award**

- "Coordinate Chart Particle Filter for Deformable Object Pose Estimation," *University of Michigan Engineering Research Symposium Winter 2021.* (Poster Presentation)

- "TSBP: Tangent Space Belief Propagation for Manifold Learning," *International Conference on Intelligent Robots and Systems (IROS) 2020.* (Technical Talk)

- "TSBP: Tangent Space Belief Propagation for Manifold Learning," *University of Michigan Engineering Research Symposium 2019.* (Poster Presentation)

TEACHING	**University of Michigan**, Ann Arbor, Michigan, USA	Winter 2022

Instructor Aide, *Introduction to Autonomous Robotics*

University of Michigan, Ann Arbor, Michigan, USA   Fall 2021
Instructor Aide, *Introduction to AI and Programming*

University of Michigan, Ann Arbor, Michigan, USA   Winter 2020
Instructor Aide, *Introduction to Microprocessor Computing Systems*

	University of Michigan, Ann Arbor, Michigan, USA	Winter 2019
	Instructor Aide, *Introduction to Microprocessor Computing Systems*	

WORK EXPERIENCE	**Laboratory for Progress**, University of Michigan	Research Assistant
	Ann Arbor, MI, USA	2016 - 2022
	Research Advisor: Professor Chad Jenkins	
	Robotics @ Marygrove, University of Michigan	Curriculum Designer
	Ann Arbor, MI, USA	2021
	Number DNA	Software Developer
	Ann Arbor, MI, USA	2017 - 2018
	Center for Healthcare Engineering and Patient Safety	Software Developer
	Ann Arbor, MI, USA	2017
	Green Ladder Technologies LLC	Embedded Systems Developer
	Batavia, IL, USA	2015 - 2016

EXTRA-CURRICULAR ACTIVIES	**Michigan Marching Band**, University of Michigan	2017 - 2022
	Cymbal section leader 2019 - 2022	
	Michigan Hockey Pep Band, University of Michigan	2017 - 2022
	Michigan Percussion Chamber Ensemble, University of Michigan	2018 - 2020

HONORS AND AWARDS

University of Michigan College of Engineering Honors Program (Computer Science)
University of Michigan College of Literature, Science, and the Arts Honors Program (Mathematics)
University of Michigan Outstanding Undergraduate Research Award (2022)
Member: Tau Beta Pi Honor Society
Member: Phi Kappa Phi Honor Society
Dean's List x7
University Honors x7
The Gloria Wille Bell and Carlos R. Bell Scholarship
Raab Family Scholarship
Regents Merit Scholarship
Wanda W. Lincoln Scholarship
Detroit News/CATCH Scholarship for Mathematics