

Thomas Cohn

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EDUCATION	University of Michigan, Ann Arbor, USA 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	2017 - 2022
RESEARCH	Articles <ul style="list-style-type: none">• Thomas Cohn, Nikhil Devraj, Odest Chadwicke Jenkins, “Topologically-Informed Atlas Learning,” <i>Proceedings of the 2022 IEEE International Conference on Robotics and Automation (ICRA)</i>.• Thomas Cohn, Odest Chadwicke Jenkins, Karthik Desingh, Zhen Zeng, “TSBP: Tangent Space Belief Propagation for Manifold Learning,” <i>Robotics and Automation: Letters 2020</i>. Presentations <ul style="list-style-type: none">• “Topologically-Informed Atlas Learning,” <i>IEEE International Conference on Robotics and Automation (ICRA) 2022</i>. (Technical Talk and Poster Presentation)• “Topologically-Informed Atlas Learning,” <i>University of Michigan Engineering Research Symposium Fall 2021</i>. (Poster Presentation) - 1st Place Award• “Coordinate Chart Particle Filter for Deformable Object Pose Estimation,” <i>University of Michigan Engineering Research Symposium Winter 2021</i>. (Poster Presentation)• “TSBP: Tangent Space Belief Propagation for Manifold Learning,” <i>International Conference on Intelligent Robots and Systems (IROS) 2020</i>. (Technical Talk)• “TSBP: Tangent Space Belief Propagation for Manifold Learning,” <i>University of Michigan Engineering Research Symposium 2019</i>. (Poster Presentation)	
TEACHING	University of Michigan, Ann Arbor, Michigan, USA Instructor Aide, <i>Introduction to Autonomous Robotics</i>	Winter 2022
	University of Michigan, Ann Arbor, Michigan, USA Instructor Aide, <i>Introduction to AI and Programming</i>	Fall 2021
	University of Michigan, Ann Arbor, Michigan, USA Instructor Aide, <i>Introduction to Microprocessor Computing Systems</i>	Winter 2020
	University of Michigan, Ann Arbor, Michigan, USA Instructor Aide, <i>Introduction to Microprocessor Computing Systems</i>	Winter 2019

WORK EXPERIENCE	Laboratory for Progress , University of Michigan Ann Arbor, MI, USA Research Advisor: Professor Chad Jenkins	Research Assistant 2016 - 2022
	Robotics @ Marygrove , University of Michigan Ann Arbor, MI, USA	Curriculum Designer 2021
	Number DNA Ann Arbor, MI, USA	Software Developer 2017 - 2018
	Center for Healthcare Engineering and Patient Safety Ann Arbor, MI, USA	Software Developer 2017
	Green Ladder Technologies LLC Batavia, IL, USA	Embedded Systems Developer 2015 - 2016
EXTRA-CURRICULAR ACTIVITIES	Michigan Marching Band , University of Michigan Cymbal section leader 2019 - 2022	2017 - 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) 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	
RELEVANT COURSE-WORK	Computer Science: Object-Oriented Programming, Data Structures and Algorithms, Algorithms for Data Science, Autonomous Robotics, Computer Security, Machine Learning, Computer Vision, Computational Statistics	
	Mathematics: Multivariable Calculus, Differential Equations, Abstract Algebra (Group Theory, Ring/Module Theory), Probability Theory, Graph Theory, Linear Algebra, Numerical Methods, Topology, Differentiable Manifolds, Riemannian Geometry, Convex Optimization	