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# Tzu-Han Hsu



## EDUCATION

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|---|--------------|
| <b>Ph.D. Student in Computer Science Engineering</b><br>Michigan State University, East Lansing, MI, USA                                | 2020–Present |
| <b>Bachelor of Science in Computer Science</b><br><b>Bachelor of Music in Piano Performance</b><br>Iowa State University, Ames, IA, USA | 2013–2020    |

## RESEARCH INTERESTS

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Formal Methods, Model Checking, Synthesis of Hyperproperties, Privacy and Information-Flow Security

## EXPERIENCE

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| <b>Graduate Research Assistant</b><br>Department of Computer Science and Engineering, Michigan State University | 2020–Present |
| <b>Research Assistant</b><br>Department of Computer Science, Iowa State University                              | 2019–2020    |
| <b>Software Engineer Intern</b><br>Worrell Inc., Minneapolis, MN  | 2019–2020    |

## CONFERENCE PAPERS

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1. [Tzu-Han Hsu](#), César Sánchez, Borzoo Bonakdarpour, “**Bounded Model Checking for Hyperproperties**” In *International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS)*, Luxembourg, Luxembourg. To appear. (2020)

## PREPRINTS

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1. [Tzu-Han Hsu](#), Yu Wang, Borzoo Bonakdarpour, Miroslav Pajic, “**Multi-Agent Path Planning with Hyperproperties**” (2020)

## TEACHING EXPERIENCE

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- **Graduate Teaching Assistant** at Michigan State University  
*Discrete Structures in Computer Science (CSE 260)* Spring 2020
- **Teaching Assistant** at Iowa State University  
*Object-Oriented Programming (COM S 227)* Spring 2018, Fall 2018

## SCHOLARSHIPS AND AWARDS

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- Nomination of Outstanding Senior of Department Award 2020
- Iowa State University College of Liberal Arts and Sciences Dean's List 2013–2020
- Future Leader Award, Issued by U.S. Ambassador to China Terry Branstad 2018
- Iowa State University International Student Ambassador Gold Level Scholarship Recipient 2013–2018
- Iowa State University Music Department Outstanding Student Scholarship Recipient 2013–2018
- Soloist Winner, Fort Dodge Orchestra Young Artists Concerto Competition 2015
- 1st Prize Winner, Iowa State University Symphony Orchestra Concerto Competition 2014
- State Winner, Music Teacher National Association (MTNA) Piano Competition 2014

## LEADERSHIP AND VOLUNTEER EXPERIENCES

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- The Society for Collegiate Leadership & Achievement 2016–2020
- Iowa State University Student Council, Department Representative 2017–2018
- Iowa Education without Borders (non-profit) Volunteer/Event Coordinator 2017–2018
- Iowa Youth Leadership Summer Camp Student Volunteer 2017–2018
- Iowa State University Annual K-12 Computational Thinking Competition 2020