

# Tzu-Han Hsu

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## EDUCATION

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### **Ph.D. Student in Computer Science Engineering**

2020–Present

Michigan State University, East Lansing, MI, USA

### **Bachelor of Science in Computer Science**

### **Bachelor of Music in Piano Performance**

2013–2020

Iowa State University, Ames, IA, USA

## RESEARCH INTERESTS

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

## EXPERIENCE

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### **Graduate Research Assistant**

2020–Present

Department of Computer Science and Engineering, Michigan State University

### **Research Assistant**

2019–2020

Department of Computer Science, Iowa State University

### **Software Engineer Intern**

2019–2020

Worrell Inc., Minneapolis, MN

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

## 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