

Email: [tzuhan@msu.edu](mailto:tzuhan@msu.edu)  
Phone: (515) 441-6303  
Web: [tzuhancs.github.io](https://tzuhancs.github.io)  
LinkedIn: [tzuhansu](https://www.linkedin.com/in/tzuhansu)

# Tzu-Han Hsu



## EDUCATION

---

<b>Ph.D. Student in Computer Science Engineering</b> Michigan State University, East Lansing, MI, USA	2020–Present
<b>Bachelor of Science in Computer Science</b> Iowa State University, Ames, IA, USA	2016–2020
<b>Bachelor of Music in Piano Performance</b> Iowa State University, Ames, IA, USA	2013–2017

## RESEARCH INTERESTS

---

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

## EXPERIENCE

---

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

## CONFERENCE PAPERS

---

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’21)*, Luxembourg, Luxembourg.

## PREPRINTS

---

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

## TEACHING EXPERIENCE

---

- **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

---

- 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

---

- 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