

# Xiaolin Sun

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## EDUCATION&HONORS

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**Tulane University, Department of Computer Science,** New Orleans, LA

August 2020-Present

### Doctoral Student

- Cumulative GPA: 3.94/4.00
- Courses Taken: Reinforcement Learning, Machine Learning, Algorithms, Distributed Systems, Multi-agent Systems, Artificial Intelligence, Computer Vision

**Colgate University,** Hamilton, NY

August 2016-May 2020

### Bachelor of Arts

- Double Major: Computer Science and Mathematical Economics
- Cumulative GPA: 3.66/4.00, Mathematical Economics GPA: 3.73/4.00, Computer Science GPA: 4.02/4.00
- Dean's Award with Distinction for Academic Excellence (Fall 2016-Fall 2017, Fall 2018- Fall 2019)
- Dean's Award for Academic Excellence (Spring 2018)
- Member of Phi Eta Sigma honor society

## EXPERIENCE

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*Research Assistant*

September 2021-Present

### **Tulane University Computer Science Department**

*I worked as a research assistant for Prof. Zheng. I have worked projects on multi-agent reinforcement learning and robust reinforcement learning.*

*Mentor*

### **Tulane University Computer Science Department**

Summer 2023

*Help high school student on her summer research on Reinforcement Learning and its application in autonomous racing.*

*Teaching Assistant*

September 2020-May 2021

### **Tulane University Computer Science Department**

*Holding Lab sessions and office hours for Intro to Computer Science and Computer Organization courses.*

*Research Assistant*

Summer 2018-June 2020

### **Colgate University Computer Science Department**

*I worked as a research assistant for Prof. Gember-Jacobson. The project aims at developing a tool that can*

*automatically detect the errors in router configurations that cause the policies violation in a network by using SMT solver to get unsatisfiable cores.*

## **CONFERENCE ATTENDED**

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*Poster Presenter*

Aug 1<sup>st</sup> 2023

### **Thirty-ninth Conference on Uncertainty in Artificial Intelligence (UAI'23)**

- Present the paper *Pandering in a (flexible) representative democracy* during the poster session of the conference

*Poster Presenter*

Dec 1<sup>st</sup> 2022

### **Thirty-sixth Conference on Neural Information Processing Systems (NeurIPS'22)**

- Present the paper *Learning to Attack Federated Learning: A Model-based Reinforcement Learning Attack Framework* during poster sessions of the conference

*Attendee*

### **ACM Special Interest Group on Data Communication (Sigcomm'19)**

Aug 19<sup>th</sup> 2019

- Receive NSF Student Travel Grant to attend the conference

*Poster Presenter*

Feb 26<sup>th</sup> 2019

### **16th USENIX Symposium on Networked Systems Design and Implementation (NSDI'19)**

- Presented the poster *Localizing Router Configuration Errors Using Unsatisfiable Cores* during the poster sessions of the conference

## **SELECTED PUBLICATIONS**

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- [MASEC'23] Xiaolin Sun and Zizhan Zheng. *Robust Q-Learning against State Perturbations: A Belief-Enriched Pessimistic Approach*. In 1<sup>st</sup> Multi-Agent Security Workshop at NeurIPS (MASEC). 2023.
- [UAI'23] Xiaolin Sun, et al. *Pandering in a (Flexible) Representative Democracy* In 39<sup>th</sup> Conference on Uncertainty in Artificial Intelligence (UAI). 2023.
- [AAMAS'23] Xiaolin Sun, et al. *Does Delegating Votes Protect Against Pandering Candidates?* In 22<sup>nd</sup> International Conference on Autonomous Agents and Multiagent Systems (AAMAS). 2023. (Extended Abstract)
- [NeurIPS'22] Henger Li\*, Xiaolin Sun\* and Zizhan Zheng. *Learning to Attack Federated Learning: A Model-based Reinforcement Learning Attack Framework*. In 36<sup>th</sup> Conference on Neural Information Processing Systems (NeurIPS). 2022. (\*Co-Primary Author)
- [NSDI'19] Ruchit Shrestha, Xiaolin Sun, and Aaron Gember-Jacobson. *Localizing router configuration errors using unsatisfiable cores*. In 16<sup>th</sup> USENIX Symposium on Networked Systems Design and Implementation (NSDI). 2019.