

# Seyed Sajjad Nezhadi

sajjad-nezhadi.github.io

sajjad@umd.edu

## EDUCATION

**University of Maryland**, College Park, Maryland.

- Doctor of Philosophy: Computer Science
- Advisor: Matthew Coudron

2020 –

**University of Toronto**, Toronto, Canada.

- Honours Bachelor of Science: Mathematics and Computer Science
- Advisor: Henry Yuen

2015 – 2019

## PUBLICATIONS

### **Nonlocal Games, Compression Theorems, and the Arithmetical Hierarchy.**

Hamoon Mousavi, Seyed Sajjad Nezhadi, and Henry Yuen.

- In proceedings of *Symposium on Theory of Computing (STOC)* 2022.
- Presented as a **Plenary talk** at *Quantum Information Processing (QIP)* 2022.
- Presented at the *Tsirelson Memorial Workshop* 2022.
- arXiv:2110.04651.

### **Synchronous Values of Games.**

J. William Helton, Hamoon Mousavi, Seyed Sajjad Nezhadi, Vern I. Paulsen, Travis B. Russell

- Presented at the *Tsirelson Memorial Workshop* 2022.
- arXiv:2109.14741.

### **On the complexity of zero gap MIP\*.**

Hamoon Mousavi, Seyed Sajjad Nezhadi, and Henry Yuen.

- In proceedings of *International Colloquium on Automata, Languages, and Programming (ICALP)* 2020.
- Presented at *Theory of Quantum Computing (TQC)* 2020.
- arXiv:2002.10490

### **A generalization of CHSH and the algebraic structure of optimal strategies.**

David Cui, Arthur Mehta, Hamoon Mousavi, and Seyed Sajjad Nezhadi.

- In *Quantum* **4**, 346 (2020).
- Presented at *Quantum Information Processing (QIP)* 2020.
- arXiv:1911.01593

## TALKS

### **Nonlocal Games, Compression Theorems, and the Arithmetical Hierarchy.**

*Symposium on Theory of Computing (STOC)*, Jun 2022.

### **Nonlocal Games, Compression Theorems, and the Arithmetical Hierarchy.**

*Tsirelson Memorial Workshop*, Apr 2022.

### **Synchronous Values of Games.**

*Tsirelson Memorial Workshop*, Apr 2022.

### **Quantum computing for the gifted amateur.**

Kurius, Mar 2022.

### **Generalization of CHSH.**

University of Copenhagen, Jan 2022.

### **Computability and compression of nonlocal games.**

University of Ottawa, Oct 2021.

### **Computability and compression of nonlocal games.**

IQC-QuICS Math and Computer Science seminar, Mar 2021.

### **Quantum computing: why you should care!**

Isfahan University of Technology, Mar 2021.

### **On the complexity of zero gap MIP\*.**

*Theory of Quantum Computing (TQC)*, Jun 2020.

<b>WORKSHOPS</b>	<b>Quantum Error Correction Summer School.</b>	
	IBM, Jul 2022.	
	<b>Analysis on the hypercube with applications to quantum computing.</b>	
	American Institute of Mathematics, Jun 2022.	
	<b>Tsirelson Memorial Workshop.</b>	
	IQOQI - Vienna, Apr 2022.	
	<b>Non-local games in quantum information theory.</b>	
	American Institute of Mathematics, May 2021.	
<b>WORK EXPERIENCE</b>	<b>Xanadu</b> , Toronto, Canada.	
	▪ Quantum Research Resident	May 2021 – Aug 2021
	<b>Agnostiq</b> , Toronto, Canada.	
	▪ Quantum Applications Intern	Apr 2020 – Jul 2020
	<b>University of Toronto</b> , Toronto, Canada.	
	▪ Research Assistant	May 2019 – Apr 2020
	• Under supervision of Henry Yuen.	
	<b>Recycle Coach</b> , Toronto, Canada.	
	▪ Software Engineer Intern	May 2017 – Aug 2017
	<b>Kik Interactive</b> , Toronto, Canada.	
	▪ Software Developer	May 2016 – Aug 2016
<b>TEACHING</b>	<b>University of Maryland</b>	
	▪ Teaching Assistant	
	• CMSC456 - Cryptography	Fall 2021
	<b>University of Waterloo, Centre for Extended Learning</b>	
	▪ Assistant Instructor	
	• DS2 - Statistics for Data Science	Winter, Summer, Fall 2020
	<b>University of Toronto</b>	
	▪ Teaching Assistant	
	• CSC343 - Introduction to Databases	Winter 2019
<b>REVIEWING</b>	QIP 2022, QCrypt 2022	
<b>LANGUAGES</b>	English, Persian and French.	
<b>SKILLS</b>	Python, Matlab, C++, SQL, Qiskit, Numpy, PyTorch, TensorFlow, $\text{\LaTeX}$ .	