# Seyed Sajjad Nezhadi

sajjad-nezhadi.github.io sajjad@umd.edu

#### **EDUCATION**

## University of Maryland, College Park, Maryland.

Doctor of Philosophy: Computer Science

2020 -

• Advisors: Victor Albert and Matthew Coudron

University of Toronto, Toronto, Canada.

Honours Bachelor of Science: Mathematics and Computer Science

2015 - 2019

• Advisor: Henry Yuen

#### **PUBLICATIONS**

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

Hamoon Mousavi, Seyed Sajjad Nezhadi, and Henry Yuen.

- To be presented as a **Plenary talk** at *Quantum Information Processing (QIP)* 2022.
- arXiv:2110.04651, 2021.

## **Synchronous Values of Games.**

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

arXiv:2109.14741, 2021.

## 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**

## Computability and compression of nonlocal games.

University of Ottowa, 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.

## **WORKSHOPS**

## Non-local games in quantum information theory.

American Institute of Mathematics, May 2021.

· Stipend included

# WORK EXPERIENCE

## Xanadu, Toronto, Canada.

• Quantum Research Resident

May 2021 – Aug 2021

Agnostiq, Toronto, Canada.

Quantum Applications Intern

Apr 2020 - Jul 2020

University of Toronto, Toronto, Canada.

Research Assistant

May 2019 – Apr 2020

• Under supervision of Henry Yuen.

## Recycle Coach, Toronto, Canada.

Software Engineer Intern

May 2017 - Aug 2017

Kik Interactive, Toronto, Canada.

■ Software Developer May 2016 – Aug 2016

**TEACHING** University of Maryland

■ Teaching Assistant

• CMSC456 - Cryptography Fall 2021

**University of Waterloo, Centre for Extended Learning** 

Assistant Instructor

• DS2 - Statistics for Data Science Winter, Summer, Fall 2020

**University of Toronto** 

■ Teaching Assistant

• CSC343 - Introduction to Databases Winter 2019

**REVIEWING** Quantum Information processing (QIP)

**LANGUAGES** English, Persian and French.

SKILLS Python, Matlab, C++, SQL, Qiskit, Numpy, PyTorch, TensorFlow, LATEX.