# Vishnu Iyer

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#### Education

University of Texas at Austin PhD in Computer Science, advised by Scott Aaronson

Scott Aaronson ey August 2016 - May 2020

August 2021 - present

University of California at Berkeley August 20 B.S. in Electrical Engineering and Computer Science with Highest Honors ( $\sim top 3\%$ )

#### Experience

Long Term Visitor, Simons Institute for the Theory of Computing	g Spring 2024
Summer Research Intern, Sandia National Labs	May 2023 - August 2023
Research Assistant to Prof. Scott Aaronson (UT Austin)	August 2021 - present
Research Assistant to Prof. Avishay Tal (UC Berkeley)	April 2020 - August 2021
Research Assistant to Prof. Prasad Raghavendra (UC Berkeley)	March 2019 - March 2020

#### Papers <sup>1</sup>

8.	Agnostic Tomography of Stabilizer Product States Sabee Grewal, <b>Vishnu Iyer</b> , William Kretschmer, Daniel Liang	April 2024
7.	Pseudoentanglement Ain't Cheap Sabee Grewal, <b>Vishnu Iyer</b> , William Kretschmer, Daniel Liang	April 2024
6.	QMA with Hidden Variables and Non-Collapsing Measurements Scott Aaronson, Sabee Grewal, Vishnu Iyer, Simon C. Marshall, Ronak H	March 2024 Ramachandran
5.	Bounds on the Rational Degree of Boolean Functions with Applications Vishnu Iyer, Siddhartha Jain, Matt Kovacs-Deak, Vinayak Kumar, Lu Wang, Michael Whitmeyer	October 2023 ke Schaeffer, Daochen
4.	Efficient Learning of Quantum States Prepared With Few Non-Clifford Gat Sabee Grewal, <b>Vishnu Iyer</b> , William Kretschmer, Daniel Liang	tes QIP, January 2024
3.	Improved Stabilizer Estimation via Bell Difference Sampling Sabee Grewal, <b>Vishnu Iyer</b> , William Kretschmer, Daniel Liang	QIP, January 2024
2.	Low-Stabilizer-Complexity Quantum States are not Pseudorandom Sabee Grewal, Vishnu Iyer, William Kretschmer, Daniel Liang ITCS 2023 Best Student Paper Award	ITCS, January 2023
1.	Junta Distance Approximation with Sub-Exponential Queries Vishnu Iyer, Avishay Tal, Michael Whitmeyer	CCC, July 2021

### Awards and Honors

Horizon Quantum Hackathon Winner	December 2023
UT Austin Graduate Dean's Prestigious Fellowship	March 2023
NSF Graduate Research Fellowship	March 2023
ITCS Best Student Paper Award	January 2023
UT Austin Chair's Strategic Fellowship	April 2021
UC Berkeley University Medal Semifinalist	February 2020
UC Berkeley Outstanding GSI Award	March 2019

## Teaching

Analysis of Boolean Functions, UT Austin	Spring 2023
Quantum Information Science, UT Austin	Spring 2022
Algorithms and CS Theory, UT Austin	Fall 2021
Algorithms and CS Theory, UC Berkeley	Spring 2020
Algorithms and CS Theory, UC Berkeley	Fall 2019
Discrete Mathematics and Probability Theory, UC Berkeley	Summer 2019
Algorithms and CS Theory, UC Berkeley	Spring $2019$
Discrete Mathematics and Probability Theory, UC Berkeley	Summer 2018

## Volunteering and Leadership

Instructor, Texas Prison Education InitiativeAugusTaught mathematics to local prison inmates, free of charge.Augus	t 2022 - December 2022		
President, Eta Kappa Nu, Mu Chapter Mag   President of the Electrical Engineering and Computer Sciece Honors Society at	y 2019 - December 2019 5 UC Berkeley.		
<b>Department Relations, Eta Kappa Nu, Mu Chapter</b> Executive officer in charge of liaising with the department.	May 2018 - May 2019		
<b>Co-Founder and Contributor, Undergraduate Theoretical CS Club</b> Organized and held outreach events for theoretical computer science education	May 2018 - May 2020		
Talks			
Learning Beyond Stabilizer States University of Washington theory lunch.	August 2023		
Learning Beyond Stabilizer States Sandia National Labs Quantum Algorithms and Applications Collaboratory se	June 2023 minar.		
Low-Stabilizer-Complexity Quantum States are not Pseudorandom Innovations in Theoretical Computer Science (ITCS) 2023.	January 2023		
Low-Stabilizer-Complexity Quantum States are not Pseudorandom University of Chicago theory lunch.	October 2022		
Junta Distance Approximation with Sub-Exponential Queries Conference for Computational Complexity (CCC) 2021.	July 2021		