SURENDRA GHENTIYALA

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EDUCATION

Cornell University *Aug 2022-Present*
Ph.D. in Computer Science
Advisor: Noah Stephens-Davidowitz
Research Focus: Theoretical Computer Science
Overall GPA: 4.04

University of California, Santa Barbara *Sep 2019-Dec 2021*
B.S in Computer Science *cum laude*
Advisor: Tevfik Bultan

EXPERIENCE

Simons Institute for the Theory of Computing at UC Berkeley *May 2022-Aug 2022*
Advisor: Venkatesan Guruswami
Research in LLM watermarking using cryptography and coding theory

PAPERS

New constructions of pseudorandom codes
Surendra Ghentiyala, Venkatesan Guruswami
In Submission

The more the merrier! On total coding and lattice problems and the complexity of finding multicollisions
Huck Bennett, Surendra Ghentiyala, Noah Stephens-Davidowitz
16th Innovations in Theoretical Computer Science (ITCS), 2025

More basis reduction for linear codes: backward reduction, BKZ, slide reduction, and more
Surendra Ghentiyala, Noah Stephens-Davidowitz
International Conference on Approximation Algorithms for Combinatorial Optimization Problems (APPROX), 2024

Obtaining Information Leakage Bounds via Approximate Model Counting
Seemanta Saha*, **Surendra Ghentiyala***, Shihua Lu, Lucas Bang, Tevfik Bultan
Programming Language Design and Implementation (PLDI), 2023
(*equal contribution)

TALKS

More basis reduction for linear codes: backward reduction, BKZ, slide reduction, and more
International Conference on Approximation Algorithms for Combinatorial Optimization Problems (APPROX), 2024

TFNP and Multicollisions
Cornell Theory Tea, 2023

Obtaining Information Leakage Bounds via Approximate Model Counting
Programming Language Design and Implementation (PLDI), 2023

Quantitative Program Analysis with KLEE
Early Research Scholars Program, 2021

TEACHING EXPERIENCE

Graduate Teaching Assistant, Cornell University   Aug 2022-May 2023

· CS 4700/5700 Foundations of Artificial Intelligence
· CS 4120/5120 Introduction to Compilers

AWARDS & ACHIEVEMENTS

NSF Graduate Research Fellowships Program (GRFP) Honorable Mention   April 2024

Dean's List   Sep 2019-Dec 2021

· 6/7 Trimester's at University of California, Santa Barbara

PROFESSIONAL SERVICE

Subreviewer   2023-2024

· ICALP (2024)
· FOCS (2023)

Graduate Student Recruitment for Outreach Events   Aug 2023 - Present

· For Association of Computer Science (ACSU) research night
· For informational panel on applying to graduate school

Research Night   2023-Present

· Presented cryptography research to undergraduate students interested in computer science research every semester

SKILLS

Programming Languages   C++, Haskell, Java, Python