

# SURENDRA GHENTYALA

sg974@cornell.edu

## EDUCATION

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### Cornell University

*Aug 2022-Present*

Ph.D. in Computer Science

Advisor: Noah Stephens-Davidowitz

Research Focus: Theoretical Computer Science

Overall GPA: 4.00

### University of California, Santa Barbara

*Sep 2019-Dec 2021*

B.S in Computer Science *cum laude*

Advisor: Tevfik Bultan

Overall GPA: 3.85

### De Anza College

*2017-2019*

4 dual enrollment courses as high school student

Overall GPA: 4.00

## PAPERS

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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

*In Submission*

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

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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

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### Graduate Teaching Assistant, Cornell University

Aug 2022-May 2023

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

## AWARDS & ACHIEVEMENTS

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### Dean's List

April 2024

- NSF Graduate Research Fellowships Program (GRFP) Honorable Mention

### Dean's List

Sep 2019-Dec 2021

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

## PROFESSIONAL SERVICE

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### 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

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### Programming Languages

C++, Haskell, Java, Python