

Pei Wu  
Computer Science Department  
University of California, Los Angeles

## Research Interests

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I am broadly interested in theoretical computer science. My Ph.D. thesis focuses on computational complexity theory and analytic measures of complexity.

## Education

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2015–PRESENT: UNIVERSITY OF CALIFORNIA, LOS ANGELES

*Ph.D. candidate*

*Ph.D. advisor: Alexander Sherstov*

*GPA: 4.0*

2013–2015: DARTMOUTH COLLEGE

*M.S., Computer Science*

*Thesis advisor: Amit Chakrabarti*

2009–2013: NANJING UNIVERSITY, CHINA

*Bachelor of Science, Computer Science and Technology*

*GPA: 89/100*

## Conference Publications

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*Optimal interactive coding for insertions, deletions, and substitutions*

A. A. Sherstov, P. Wu

58th Annual Symposium on Foundations of Computer Science (FOCS 2017)

*Near-optimal lower bounds on the threshold degree and sign-rank of  $AC^0$*

A. A. Sherstov, P. Wu

51st ACM Symposium on Theory of Computing (STOC 2019)

*Invited to appear in SIAM Journal on Computing (special issue for STOC 2019)*

*An optimal separation of randomized and quantum query complexity*

A. A. Sherstov, A. A. Storozhenko, P. Wu

Submitted to STOC 2021

## Journal Publications

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*Optimal interactive coding for insertions, deletions, and substitutions*

A. A. Sherstov, P. Wu

*IEEE Transactions on Information Theory*, **65**(10):5971–6000, 2019

*Near-optimal lower bounds on the threshold degree and sign-rank of  $AC^0$*

A. A. Sherstov, P. Wu

To appear in *SIAM Journal on Computing*, 2021

## Speaking Engagements

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10/2017    “*Optimal interactive coding for insertions, deletions, and substitutions*”

FOCS 2017, October 15-17, 2017 in Berkeley, California

7/2019    “*Near-optimal lower bounds on the threshold degree and sign-rank of  $AC^0$* ”

STOC 2019, June 23-26, 2019 in Phoenix, Arizona

2/2020    “*Settling the threshold degree and sign-rank of  $AC^0$* ”

Invited plenary talk, Southern California Theory Day, UC Riverside, CA

## Honors and Awards

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1/2020    Special issue invitation from *SIAM Journal on Computing*, for STOC 2019 paper “Near-Optimal Lower Bounds on the Threshold Degree and Sign-rank of  $AC^0$ ”

2/2020    Invited plenary speaker at Southern California Theory Day

6/2020    Outstanding Graduate Student Research Award (Computer Science Department, UCLA)

10/2020    Dissertation Year Fellowship (Graduate Division, UCLA)

## References

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Amit Chakrabarti (Department of Computer Science, Dartmouth College)

Eliezer Gafni (Computer Science Department, UCLA)

Raghu Meka (Computer Science Department, UCLA)

Rafail Ostrovsky (Computer Science Department, UCLA)

Alexander Sherstov (Computer Science Department, UCLA)

## Teaching and Service

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Conference/journal reviewing: ICALP, STOC/FOCS, Algorithmica

Teaching assistant: CS 31 (Algorithms at Dartmouth College), CS 181 (Formal Language and Automata Theory at UCLA)