

# Chao Xu

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## Research Interest

Combinatorial Optimization · Computational Geometry · Algorithms

## Education

- 2018 (Expected May 2018) PHD in Computer Science, University of Illinois at Urbana-Champaign  
Advisors: Karthik Chandrasekaran and Chandra Chekuri.
- 2013 BS in Mathematics and Applied Mathematics & Statistics with minor in Computer Science, Stony Brook University

## Conference Publications

- 2017 Konstantinos Koiliaris and Chao Xu. A faster pseudopolynomial time algorithm for subset sum. In *Proceedings of the Twenty-Eighth Annual ACM-SIAM Symposium on Discrete Algorithms*, pages 1062–1072. SIAM, 2017.
- 2017 Chandra Chekuri and Chao Xu. Computing minimum cuts in hypergraphs. In *Proceedings of the Twenty-Eighth Annual ACM-SIAM Symposium on Discrete Algorithms*, pages 1085–1100. SIAM, 2017.
- 2015 Chandra Chekuri, Thapanapong Rukkanchanunt, and Chao Xu. On element-connectivity preserving graph simplification. In Nikhil Bansal and Irene Finocchi, editors, *Algorithms - ESA 2015*, volume 9294 of *Lecture Notes in Computer Science*, pages 313–324. Springer Berlin Heidelberg, 2015.
- 2015 Hsien-Chih Chang, Jeff Erickson, and Chao Xu. Detecting weakly simple polygons. In *Proceedings of the Twenty-Sixth Annual ACM-SIAM Symposium on Discrete Algorithms*, pages 1655–1670. SIAM, 2015.

## Journal Publications

- 2016 Chao Xu. Reconstructing edge-disjoint paths faster. *Operations Research Letters*, 44(2):174 – 176, 2016.
- 2013 Neil J. Calkin, Janine E. Janoski, Allison Nelson, Sydney Ryan, and Chao Xu. Champion spiders in the game of Graph Nim. *Congr. Numer.*, 218:5–19, 2013.

## Fellowship/Scholarship

- 2016-2017 State Farm Companies Foundation Doctoral Scholar
- 2010-2012 NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM)