

Jiapeng ZHANG

CONTACT INFORMATION	E-mail: jiapengz@usc.edu
CURRENT POSITION	University of Southern California , California, United States 2020 - <ul style="list-style-type: none">• Assistant Professor, Department of Computer Science
RESEARCH INTERESTS	Boolean function analysis, machine learning theory, computational complexity and cryptography
PAST POSITION	Harvard University , Massachusetts, United States 2019 - 2020 <ul style="list-style-type: none">• Postdoc, Department of Computer Science
EDUCATION	University of California, San Diego , California, United States 2013 - 2019 <ul style="list-style-type: none">• Doctor of Philosophy, Department of Computer Science and Engineering University of California, San Diego , California, United States 2013 - 2016 <ul style="list-style-type: none">• Master of Computer Science, Department of Computer Science and Engineering Shanghai Jiao Tong University , Shanghai, P.R. China 2007 - 2011 <ul style="list-style-type: none">• BSc, Department of Computer Science and Engineering
HONOURS AND AWARDS	<ul style="list-style-type: none">• Best paper award of STOC 2020. For the paper “Improved bounds for the sunflower lemma”, (joint work with Ryan Alweiss, Shachar Lovett and Kewen Wu)
PUBLICATIONS	SHACHAR LOVETT, KEWEN WU AND JIAPENG ZHANG. <i>Decision list compression by mild random restrictions</i> . In Proceeding of the 52nd ACM Symposium on Theory of Computing (STOC) 2020. RYAN ALWEISS, SHACHAR LOVETT, KEWEN WU AND JIAPENG ZHANG. <i>Improved bounds for the sunflower lemma</i> . In Proceeding of the 52nd ACM Symposium on Theory of Computing (STOC) 2020. SHACHAR LOVETT, NOAM SOLOMON AND JIAPENG ZHANG. <i>From DNF compression to sunflower theorems via regularity</i> . In Computational Complexity Conference (CCC) 2019. SHACHAR LOVETT AND JIAPENG ZHANG. <i>DNF sparsification beyond sunflowers</i> . In Proceeding of the 51st ACM Symposium on Theory of Computing (STOC) 2019. KUN HE, QIAN LI, XIAOMING SUN AND JIAPENG ZHANG. <i>Quantum Lovász Local Lemma: Shearer’s Bound is Tight</i> . In Proceeding of the 51st ACM Symposium on Theory of Computing (STOC) 2019. XIN LI, SHACHAR LOVETT, AND JIAPENG ZHANG. <i>Sunflowers and Quasi-sunflowers from Randomness Extractors</i> . In RANDOM 2018.

YI-HSIU CHEN, MIKA GÖÖS, SALIL VADHAN AND JIAPENG ZHANG. *A Tight Lower Bound for Entropy Flattening*. In Computational Complexity Conference (CCC) 2018.

SHACHAR LOVETT, AVISHAY TAL AND JIAPENG ZHANG. *The Robust Sensitivity of Boolean Functions*. In Symposium on Discrete Algorithms (SODA) 2018.

SHACHAR LOVETT AND JIAPENG ZHANG. *On the impossibility of entropy reversal, and its application to zero-knowledge proofs*. In Theory of Cryptography Conference (TCC) 2017.

BO TANG AND JIAPENG ZHANG. *Barriers to Black-box Constructions of Traitor Tracing Systems*. In Theory of Cryptography Conference (TCC) 2017.

DANIEL M. KANE, SHACHAR LOVETT, SHAY MORAN AND JIAPENG ZHANG. *Active classification with comparison queries*. In Foundations of Computer Science (FOCS) 2017.

SHACHAR LOVETT AND JIAPENG ZHANG. *Noisy Population Recovery from Unknown Noise*. In Conference on Learning Theory (COLT) 2017.

SHACHAR LOVETT AND JIAPENG ZHANG. *Improved noisy population recovery, and reverse Bonami-Beckner inequality for sparse functions*. In Proceeding of the 47th ACM Symposium on Theory of Computing (STOC) 2015.

JIAPENG ZHANG, *On the query complexity for showing dense model*. Technical Report TR11-038, Electronic Colloquium on Computational Complexity, 2011

TEACHING
EXPERIENCES

Teaching assistant of CSE 105, Theory of computation, Spring 2019

Teaching assistant of CSE 105, Theory of computation, Fall 2017

Teaching assistant of CSE 20, Discrete mathematics, Fall 2016

Teaching assistant of CSE 21, Mathematics for Algorithm, Spring 2016

Teaching assistant of CSE 20, Discrete mathematics, Fall 2015

Teaching assistant of CSE 190, Great Ideas in Algorithms, Spring 2015