

LIANGZU PENG

[Homepage] [OpenReview] [Google Scholar] [lpenn@seas.upenn.edu] [+1 (667) 910 4063]

PUBLICATIONS

(Co-)First Author Papers.

1. HARD: Hyperplane ARangement Descent
Tianjiao Ding*, LP*, and René Vidal [*: Equal Contribution]
[CPAL 2024, [Oral Presentation](#)]
2. Block Coordinate Descent on Smooth Manifolds
LP and René Vidal
[arXiv]
3. The Ideal Continual Learner: An Agent That Never Forgets
LP, Paris V. Giampouras, and René Vidal
[ICML 2023] [OpenReview] [CLVision Workshop 2023] [arXiv] [poster]
4. On the Convergence of IRLS and Its Variants in Outlier-Robust Estimation
[Highlight, 235/9155≈2.5% Acceptance Rate](#)
LP, Christian Kümmerle, and René Vidal
[CVPR 2023] [pdf] [talk video] [slides] [poster]
5. Global Linear and Local Superlinear Convergence of IRLS for Non-Smooth Robust Regression
LP, Christian Kümmerle, and René Vidal
[NeurIPS 2022] [OpenReview] [arXiv] [code] [slides] [poster]
6. Semidefinite Relaxations of Truncated Least-Squares in Robust Rotation Search: Tight or Not
[Oral Presentation, 158/5803≈2.7% Acceptance Rate](#)
LP, Mahyar Fazlyab, and René Vidal
[ECCV 2022] [arXiv] [slides] [talk video] [poster]
7. ARCS: Accurate Rotation and Correspondence Search
[Oral Presentation, 342/8161≈4.2% Acceptance Rate](#)
LP, Manolis C. Tsakiris, and René Vidal
[CVPR 2022] [arXiv] [code] [slides] [talk video] [poster]
8. Homomorphic Sensing: Sparsity and Noise
LP, Boshi Wang, and Manolis C. Tsakiris
[ICML 2021] [pdf] [talk video]
9. Algebraically-Initialized Expectation Maximization for Header-Free Communication
LP, Xuming Song, Manolis C. Tsakiris, Hayoung Choi, Laurent Kneip, and Yuanming Shi
[ICASSP 2019] [pdf]
10. Homomorphic Sensing of Subspace Arrangements
[Applied and Computational Harmonic Analysis, 2021](#)
LP and Manolis C. Tsakiris
[arXiv]
11. Linear Regression Without Correspondences via Concave Minimization
IEEE Signal Processing Letters, 2020
LP and Manolis C. Tsakiris
[arXiv] [code]

Other Papers.

1. Accelerating Globally Optimal Consensus Maximization in Geometric Vision
Xinyue Zhang, [LP](#), Wanting Xu, and Laurent Kneip
[IEEE Transactions on Pattern Analysis and Machine Intelligence, 2024](#) (to appear)
[\[arXiv\]](#)
2. Unlabeled Principal Component Analysis
Yunzhen Yao, [LP](#), and Manolis C. Tsakiris
[\[NeurIPS 2021\]](#) [\[OpenReview\]](#) [\[arXiv\]](#) [\[code\]](#)
3. Unsigned Matrix Completion
Yunzhen Yao, [LP](#), and Manolis C. Tsakiris
[\[ISIT 2021\]](#) [\[pdf\]](#)
4. An Algebraic-Geometric Approach to Linear Regression Without Correspondences
[IEEE Transactions on Information Theory, 2020](#)
Manolis C. Tsakiris, [LP](#), Aldo Conca, Laurent Kneip, Yuanming Shi, and Hayoung Choi
[\[arXiv\]](#) [\[code\]](#)
5. Homomorphic Sensing
Manolis C. Tsakiris and [LP](#)
[\[ICML 2019\]](#) [\[arXiv\]](#) [\[code\]](#)