

LIANGZU PENG

www.liangzu.org

EDUCATION

- ShanghaiTech Univerisity*, Shanghai, China Sep. 2017 - Jun. 2021 (expected)
 M.S. in Computer Science (advisor: Manolis C. Tsakiris)
- Zhejiang University*, Hangzhou, China Sep. 2013 - Jun. 2017
 B.Eng. in Measurement Control Technology and Instruments

PUBLICATION

Submitted.

1. **L. Peng**, B. Wang, M. C. Tsakiris, "Homomorphic sensing: sparsity and noise", 2021.
2. Y. Yao, **L. Peng**, and M. C. Tsakiris, "Unsigned matrix completion", 2021.
3. Y. Yao, **L. Peng**, and M. C. Tsakiris, "Unlabeled principal component analysis", *arXiv:2101.09446v1 [cs.LG]*, 2021.
4. **L. Peng** and M. C. Tsakiris, "Homomorphic sensing of subspace arrangements", *arXiv:2006.05158v2 [cs.LG]*, 2020.

Journal Papers.

1. **L. Peng** and M. C. Tsakiris, "Linear regression without correspondences via concave minimization", in *IEEE Signal Processing Letters*, vol. 27, pp. 1580-1584, 2020.
2. M. C. Tsakiris, **L. Peng**, A. Conca, L. Kneip, Y. Shi, and H. Choi, "An algebraic-geometric approach to linear regression without correspondences", in *IEEE Transactions on Information Theory*, vol. 66, no. 8, pp. 5130-5144, 2020.

Conference Papers.

1. M. C. Tsakiris and **L. Peng**, "Homomorphic sensing", *International Conference on Machine Learning (ICML)*, 2019.
2. **L. Peng**, X. Song, M. C. Tsakiris, H. Choi, L. Kneip, and Y. Shi, "Algebraically-initialized expectation maximization for header-free communication", *International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2019.

WORK EXPERIENCE

- Teaching Associate - New York University, Shanghai* Sep. 2020 - Now
 Algorithms — lead the recitation sessions, design homework, grade assignments
- Intern - New York University, Shanghai* Feb. 2020 - Jun. 2020
 Discrete Mathematics — grade assginments and lead the recitation sessions
 Algorithms — write solutions and grade assginments

PROFESSIONAL SERVICE

Reviewed several papers submitted to:

- International Conference on Machine Learning
- Neural Information Processing Systems
- International Symposium on Information Theory
- International Conference on Acoustics, Speech, and Signal Processing
- IEEE Transactions on Image Processing
- IEEE Transactions on Signal Processing (invited)

TEACHING

As Teaching Assistant:

CSCI-SHU 220, Algorithms	Spring 2021, NYU-Shanghai
SI 232, Subspace Learning	Fall 2020, ShanghaiTech
CSCI-SHU 220, Algorithms	Fall 2020, NYU-Shanghai
CSCI-SHU 2314, Discrete Mathematics	Spring 2020, NYU-Shanghai
CSCI-SHU 220, Algorithms	Spring 2020, NYU-Shanghai
MATH 2111, Topological Data Analysis	Spring 2020, ShanghaiTech
SI 232, Subspace Learning	Fall 2019, ShanghaiTech
CS 133, Advanced C++ Programming	Spring 2019, ShanghaiTech
SI 192, Applied Algebraic Geometry	Spring 2019, ShanghaiTech
SI 112, Advanced Geometry ¹	Spring 2018, ShanghaiTech

KNOWLEDGE

Computing:

Algorithms, Computer Vision, Visual SLAM, Deep Learning, Compiler, C, C++, Python, Java, Matlab, Shell, PyTorch.

(Applied) Mathematics:

Algebraic Geometry, Point Set Topology, Optimization, Matrix Analysis, Topological Data Analysis

¹lecture notes available: <http://www.liangzu.org/en/ag-notes.html>