

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

arXiv.

1. **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, Aug. 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

IEEE Transactions on Signal Processing (invited)

TEACHING

As Teaching Assistant:

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 Geometry¹

Spring 2018, ShanghaiTech

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

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