penglz@shanghaitech.edu.cn, lp2528@nyu.edu Jan. 26th, 2020

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. Y. Yao, **L. Peng**, and M. C. Tsakiris, "Unlabeled principal component analysis", arXiv:2101.09446v1 [cs.LG], 2021.
2. **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:

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

[1] lecture notes available: `http://www.liangzu.org/en/ag-notes.html`