lpeng25@jhu.edu July 30th, 2021

LIANGZU PENG

www.liangzu.org

EDUCATION

Johns Hopkins University, Baltimore, USA

Sep. 2021 - Now

Ph.D. in Electrical and Computer Engineering (advisor: Professor René Vidal)

Thesis: TBD

ShanghaiTech University, Shanghai, China

Sep. 2017 - Jun. 2021

M.S. in Computer Science (advisor: Professor Manolis C. Tsakiris)

Thesis: From Linear Regression Without Correspondences to Homomorphic Sensing

Zhejiang University, Hangzhou, China

Sep. 2013 - Jun. 2017

B.Eng. in Measurement Control Technology and Instruments

Thesis: Image Measurement Software for Visual Detection

PUBLICATION

Journal Papers.

- 1. L. Peng and M. C. Tsakiris, "Homomorphic sensing of subspace arrangements", Applied and Computational Harmonic Analysis, vol. 55, pp. 466-485, 2021.
- 2. **L. Peng** and M. C. Tsakiris, "Linear regression without correspondences via concave minimization", in IEEE Signal Processing Letters, vol. 27, pp. 1580-1584, 2020.
- 3. 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. Y. Yao, L. Peng, and M. C. Tsakiris, "Unlabeled principal component analysis", Neural Information Processing Systems (NeurIPS), 2021.
- 2. **L. Peng**, B. Wang, and M. C. Tsakiris, "Homomorphic sensing: sparsity and noise", International Conference on Machine Learning (ICML), 2021.
- 3. Y. Yao, L. Peng, and M. C. Tsakiris, "Unsigned matrix completion", IEEE International Symposium on Information Theory (ISIT), 2021.
- 4. M. C. Tsakiris and L. Peng, "Homomorphic sensing", International Conference on Machine Learning (ICML), 2019.
- 5. L. Peng, X. Song, M. C. Tsakiris, H. Choi, L. Kneip, and Y. Shi, "Algebraically-initialized expectation maximization for header-free communication", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2019.

WORK EXPERIENCE

Teaching Associate - New York University, Shanghai

Sep. 2020 - May 2021

 $Algorithms -- lead \ the \ recitation \ sessions, \ design \ homework, \ grade \ assignments$

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

Reviewer:

International Conference on Learning Representations (2022)

Neural Information Processing Systems (2021)

International Conference on Machine Learning (2021)

zbMATH Open (2021 - Now)

TEACHING

Recitation Instructor:

CSCI-SHU 220, Algorithms

CSCI-SHU 220, Algorithms

Fall 2020, NYU-Shanghai

CSCI-SHU 2314, Discrete Mathematics

Spring 2021, NYU-Shanghai

Spring 2020, NYU-Shanghai

Teaching Assistant:

SI 232, Subspace Learning

CSCI-SHU 220, Algorithms

MATH 2111, Topological Data Analysis

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

Spring 2018, ShanghaiTech

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