# LIANGZU PENG

www.liangzu.org

## **EDUCATION**

ShanghaiTech University, Shanghai, China

Sep. 2017 - Now

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, M. C. Tsakiris, "Linear regression without correspondences via concave minimization", arXiv:2003.07706 [cs.IT], 2020.

### Journal Papers.

1. M. C.Tsakiris, L. Peng, A. Conca, L. Kneip, Y. Shi, and H. Choi, "An algebraic-geometric approach to linear regression without correspondences", IEEE Transactions on Information Theory (to appear), 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**

Intern - New York University, Shanghai

Feb. 2020 - Now

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 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 <sup>1</sup>	Spring 2018, ShanghaiTech

## KNOWLEDGE

## Computing:

Compiler, Operating System, Visual SLAM, Deep Learning, Algorithms, Computer Vision

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

# (Applied) Mathematics:

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

# <u>Skills</u>

C, C++, Python, Java, Matlab, Shell, PyTorch, Lag.X.