

# Ling Zhou

<https://sites.google.com/view/lingzhou-math/home>

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## RESEARCH INTEREST

Applied algebraic topology, topological data analysis, computational topology

## EDUCATION

**The Ohio State University**, Columbus, Ohio USA — *Ph.D. in Mathematics*

Sep 2017 - Now, GPA 4.0/4.0

**Hong Kong University of Science and Technology**, Hong Kong — *M.Phil. in Mathematics*

Sep 2015 - July 2017, GPA 4.0/4.3

**Sichuan University**, Chengdu, Sichuan China — *B.S. in Mathematics and Applied Mathematics*

Sep 2010 - July 2015, GPA 3.86/4.0

## PREPRINTS AND PUBLICATIONS

- Mémoli, F. & Zhou, L. Persistent Homotopy Groups of Metric Spaces. ArXiv, Dec 2019.
  - [Talk](#) in MBI Seminar Series at OSU, Sep 2020.
- Qin, T., Zhou, L., & Xiu, D. (2020). Reducing Parameter Space for Neural Network Training. *Theoretical and Applied Mechanics Letters*, 10(3), 170–181.
- Huang, J. S., & Zhou, L. (2019). Generalized Fourier Transforms Associated with the Oscillator Representation. *Journal of Fourier Analysis and Applications*, 25(5), 2782–2800.

## PAPERS IN PREPARATION

- Mémoli, F. & Zhou, L. Filtered Chain Complexes (in preparation).
- Contessoto, M. A., Mémoli, F., Stefanou, A. & Zhou, L. Persistent Cup Length (in preparation).
- Mémoli, F. & Zhou, L. Tight Span of 2-Sphere with l-Infinity Metric (in preparation).

## OTHER RESEARCH PROJECTS

Leung, W. H., Martinez, F., Sun J. & Zhou, L. [Python project to recognize Van Gogh's paintings](#). Data Science Boot Camp by The Erdős Institute, May 2020.

## AWARDS

Special Graduate Assignment, Spring 2020 (OSU)

Tibor Radó Graduate Fellowship, 2017–18 (OSU)

The 12th Epsilon Fund Award to Top Students, 2016–17 (HKUST)

Din-Yu Hsieh Teaching Award, 2016–17 (HKUST)

Scholarship of the Pilot Project for Fostering Top-Notch Students in Basic Science, 2013–14

First Class Comprehensive Scholarship, 2010–11, 2011–12 (Sichuan University, top 2%)

National Endeavor Fellowship, 2012–13, 2013–14 (top 5%)

National Scholarship, 2010–11, 2011–12 (top 2%)

## SKILLS

Python, Mathematica, C