# Yueqi Cao

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### **Education**

- Beijing Institute of Technology
  - Sep 2018 Master Candidate in Mathematics. Advisor: Huafei Sun.
  - Sep 2014 Jun 2018
    Bachelor of Science in Mathematics.

### **Publications**

#### • 2020

- Y.Wang, H.Sun, **Y.Cao**, S.Zhang, Torsion Discriminance for Stability of Linear Time-Invariant Systems, *Mathematics*. [published]

#### • 2019

- Y.Cao, D.Li, H.Sun, A.H.Assadi, S.Zhang, Efficient Curvature Estimation for Oriented Point Clouds. [preprint]
- Y.Cao, S.Zhang, F.Yan, W.Li, F.Sun, H.Sun, Unsupervised Environmental Sound Classification Based On Topological Persistence, *IEEE International Conference on Signal, Information and Data Processing* 2019. [accepted]
- S.Zhang, **Y.Cao**, W.Li, F.Yan, Y.Luo, H.Sun, A New Riemannian Structure in SPD(n), *IEEE International Conference on Signal, Information and Data Processing* 2019. [accepted]

#### 2018

- Y.Wang, H.Sun, Y.Song, **Y.Cao**, S.Zhang, Description of Stability for Two and Three-Dimensional Linear Time-Invariant Systems Based on Curvature and Torsion. [preprint]

#### • 2017

- A.Xiong, A.H.Assadi, **Y.Cao**, Calculating Persistence Homology of Attractors in High-Dimensional Chaotic Systems. 2017 International Conference on Computational Science and Computational Intelligence. [published]

# **Conference Talks**

#### • 2018

- Y.Cao, Data Science from a Topological Viewpoint, *The Second International Conference on Mathematical Characterization, Analysis and Applications of Complex Information*, Beijing, China. [slides]

# **Work Experiences**

- Beijing Institute of Technology
  - Aug 2019 Jan 2020 Teaching Assistant on Mathematical Analysis.
  - Aug 2018 Jun 2019
    Teaching Assistant on Linear Algebra.

## **Awards**

- National Scholarship for Graduate Students, Ministry of Education of the People's Republic of China, 2019.
- Second Prize of Innovation Scholarship of Industry and Information Technology of People's Republic of China, *Ministry of Industry and Information Technology of the People's Republic of China*, 2017.
- Winning Prize of Geometry and Topology in 8th S.T.Yau College Student Mathematics Contests, S.T.Yau College Student Mathematics Contests, 2017.
- Winning Prize of Team in 8th S.T.Yau College Student Mathematics Contests, *S.T.Yau College Student Mathematics Contests*, 2017.