

Teng Zhang

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Education:

- **Ph.D. in Applied Mathematics** 2006-May, 2011 (Expected)
University of Minnesota, Minneapolis, MN
Advised by Gilad Lerman, written preliminary exam passed on Aug, 2007
- **M.S. in Statistics** 2009-May, 2011 (Expected)
University of Minnesota, Minneapolis, MN
- **B.S. in Applied Mathematics** 2002-2006
Fudan University, Shanghai, China

Research Interests:

Machine Learning and Pattern Recognition, Numerical Optimization, Algorithm Design, Statistical Modeling

Research Experience:

- Research Assistant: Math department, University of Minnesota, 2007-2009
- Worked on Spectral Curvature Clustering algorithm for hybrid linear modeling, and its generalization to Riemannian geometry for manifold clustering, with applications in texture clustering and motion segmentation, coded in MATLAB, supervised by Prof. Gilad Lerman.
 - Robust hybrid linear modeling via minimizing L1 error, by stochastic gradient descent algorithm, with Arthur Szlam and Gilad Lerman, coded in MATLAB, supervised by Prof. Gilad Lerman.
- Course Project: Statistics department, University of Minnesota, 2009
- Implemented asymmetric squared loss function to greedy boosting algorithm to construct decision tree and also implemented asymmetric squared loss function to linear regression via coordinate descent algorithm, coded in R/C++, with Yi Yang, supervised by Prof. Hui Zou.

Publication:

- Median K-flats for hybrid linear modeling with many outliers, with Arthur Szlam, Gilad Lerman, to appear in 2nd international workshop on Subspace Methods (ICCV 2009).
Website: <http://math.umn.edu/~zhang620/docs/>

Advanced Courses:

- Mathematical Modeling, Numerical Analysis and Scientific Computing, Probability with Measure Theory, Numerical Solutions for Differential Equations
- Machine Learning, Image and Data Analysis, Data Structure
- Applied Statistical Methods, Mathematical Statistics
- Real analysis, Functional Analysis

Skills:

- Programming Languages: MATLAB, R, C/C++, JAVA

- Operating Systems: Windows, Linux

Honors and Awards:

- Graduate fellowship
- People's scholarship

2006-2007, University of Minnesota

2002-2005, Fudan University