

Education

- 2015- **Ph.D. student**, *Columbia University*, Department of Statistics.
- 2014-2015 **MMaths (Part III)**, *University of Cambridge*.
- 2011-2014 **B.A. Mathematics**, *University of Cambridge*.
- 2009-2011 **Baccalauréat Scientifique**, *Lycée International*, St Germain en Laye, Mention *Très Bien*.

Research interests

I am interested in a large number of problems in high-dimensional statistics and machine learning, particularly in compressed sensing and deep learning.

Preprints and Publications

- Denoising of Structured Random Processes (W. Zhou, S. Jalali), Submitted to ISIT 2019
- Non-Vacuous Generalization at the Imagenet Scale: a PAC-Bayesian Compression Approach (W. Zhou, V. Veitch, M. Austern, R. P. Adams, P. Orbanz), Accepted at ICLR 2019
- Empirical Risk Minimization and Stochastic Gradient Descent for Relational Data (V. Veitch, M. Austern, W. Zhou, P. Orbanz, D. Blei), Accepted at AISTATS 2019
- Approximate Leave-One-Out for Fast Parameter Tuning in High Dimensions (S. Wang*, W. Zhou*, H. Lu, A. Maleki, V. Mirrokni), ICML 2018
- Analysis of Genotype by Methylation Interactions through Sparsity-Inducing Regularized Regression (W. Zhou, S. Lo), BMC Proceedings 2018 (GAW 20)

Academic Service

I have served as a reviewer for JMLR, ICML, ICLR. I was also Ph.D. student representative to the faculty for my department in 2016.

Prizes and Awards

- 2016 **Howard Levene Outstanding Teaching Award**, *Department of Statistics, Columbia University*.
- 2011 **1st prize**, *Concours Général de Physique-Chimie*.
- 2011 **3rd prize**, *Concours Général de Mathématiques*.
- 2010 **2nd prize**, *Olympiades Académiques de Mathématiques (French Mathematical Olympiads)*.

Work Experience

- 2018 **Intern, Nokia Bell Labs**, Murray Hill, New Jersey.
I worked with Shirin Jalali on information theoretic aspects of signal processing. We designed information-theoretic approaches to signal denoising with provable guarantees under signal structure assumption.
- 2017 **Summer Instructor, Columbia University**, New York.
I taught the calculus-based introduction to statistics course at Columbia in the 2017 summer session. The material is available at <https://github.com/wendazhou/STATS1201>.
- 2014 **Intern, AHL**, London.
I had the opportunity to work at AHL for four weeks during the winter and ten weeks during the summer. During the winter, I implemented a dashboard aggregating and visualizing the risk exposure of various strategies traded by the fixed income team. During the summer, I worked on collecting and analyzing several data sets, applying a wide variety of techniques, from simple time series analysis to machine learning algorithms to develop trading systems.
- 2013 **Software developer, Futurmaster**, Paris.
I investigated the behaviour of sales for suppliers in the case of promotional events, using, amongst others, linear mixed effect models. I also worked on improving the development process based on my previous experience at Microsoft, introducing among others a structured code review process.
- 2012 **Junior Program Manager, Microsoft**, Paris.
PM on the “Music Intelligence” team, responsible for algorithms concerning classification, extrapolation and verification of music metadata. Main responsibility included design and tuning of an algorithm to automatically select featured content on the music market place, and coordination with various stakeholders (engineering, business, editorial).

Volunteer experience

- 2016-2017 **Ph.D. student representative, Columbia University**.
I was responsible for coordinating student activities and communication between the Ph.D. students and the faculty.
- 2014 **Mathematician in residence, Comberton village college**, Cambridge.
As part of the Cambridge “Mathematicians in residence” program, I spent two weeks teaching mathematics every day in a local sixth form. The responsibilities varied from simply assisting in the classroom to leading the classes.
- 2012 **Volunteer, STIMULUS**, Cambridge.
Stimulus is a “community service programme which gives Cambridge University students the opportunity to work with pupils in local schools”. I have helped in a Year 11 class, teaching mathematics.
- 2011-2014 **Volunteer, St John’s college access team**, Cambridge.
I volunteer on a regular basis with my college’s access team, helping with tours given to visiting school and answering students’ questions during open days.

Languages

English	Fluent	
French	Fluent	<i>Native French speaker.</i>
German	CEFR level C1	<i>Deutsche Sprachdiplom C1</i>
Spanish	Intermediate	