# *Zhenyu.LIAO*

**Present Address**
CentraleSupélec, L2S
Office A5.18
3 rue Joliot Curie
91192, Gif-sur-Yvette, France
(+33)6-67-81-50-05

**Personal information**
Date of Birth: 28/Aug/1992
Sex: Male
Citizenship: Chinese
E-mail: zhenyu.liao@l2s.centralesupelec.fr
Website: https://zhenyu-liao.github.io/

## Education

- Ph.D. in Statistics and Signal Processing, Laboratoire des signaux et systèmes, CentraleSupélec, France 2016-present
  - Thesis: A Random Matrix Approach to Deep Neural Networks Analysis.
  - Supervisor: Prof. Romain Couillet, Prof. Yacine Chitour.
- M.Sc. in Signal and Image Processing, CentraleSupélec/Paris-Sud (11), France 2014-2016
- B.Sc. in Electronic Engineering, Paris-Sud (11), France 2013-2014
- B.Sc. in Optical & Electronic Information, HUST, China 2010-2014

## Internship

**Intern,** LANEAS Group, CentraleSupélec, France. Summer 2016
- Research intern: random matrix analysis of support vector machines.
- Supervisor: Prof. Romain Couillet

**Intern,** l'Institut d'Électronique Fondamentale, CNRS, France. Summer 2015
- Research intern: modeling and circuits design of a thermoelectric system.
- Supervisors: Damien Querlioz and JérômSaint Martin

**Intern,** FiberhomeTech, China. Summer 2014
- Teaching assistant in a technical conference on telecommunication.
- Supervisor: Prof. Zhiyong TAO

## Publications

- Z. Liao, R. Couillet, "**Une Analyse des Méthodes de Projections Aléatoires par la Théorie des Matrices Aléatoires (in French)**", (submitted to) Colloque GRETSI'17, Juan Les Pins, France, 2017.
- C. Louart, Z. Liao, R. Couillet, "**A Random Matrix Approach to Neural Networks**", (submitted to) Annals of Applied Probability, 2017.
- Z. Liao, R. Couillet, "**A Large Dimensional Analysis of Least Squares Support Vector Machines**", (submitted to) Journal of Machine Learning Research, 2017.
- Z. Liao, R. Couillet, "**Random Matrices Meet Machine Learning: A Large Dimensional Analysis of LS-SVM**", IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP'17), New Orleans, USA, 2017.

## Research interests

- Machine Learning
- Random matrix theory
- Statistics