Statistics department, 367 Evans Hall,
University of California, Berkeley Berkeley, California 94704
United States of America
☎ *510-517-2648*
✉ *yuansi.chen@berkeley.edu*

Yuansi Chen

Education

2013–Present **Department of Statistics, University of California, Berkeley**, Ph.D, *GPA 3.95*.
Third-year graduate student in statistical machine learning. Currently working on stability-based model selection and on a neuroscience project about visual cortex modeling using machine learning and computer vision.

supervisor Pr. Bin Yu

2010–2013 **École Polytechnique**, *Palaiseau, France*, Diplôme d'Ingénieur (BSc & MS in Engineering), *GPA 3.80*.
The best rated french engineering school with intensive training in mathematics, physics, computer science, economics, and social sciences. Specialized in machine learning and computer vision.

2008–2010 **Lycée Hoche**, *Versailles, France*, "Classes Préparatoires".
Completion of a preparatory program required for admission to France's leading schools of science. Directly admitted to French classes preparatoires through the competitive Chinese-French Program "Cinquante Chinois en classes prepas"

Professional Experiences

01/2014–present **University of California, Berkeley**, Graduate Student Researcher in Pr. Bin Yu's group.
- Work on stability based model selection, optimization and an application to visual cortex modeling, in collaboration with Gallant's Group at UCB.

09/2016–present **University of California, Berkeley**, Statistical Consulting.
- Offer free statistical consulting in the context of course STAT272.
- Work and discuss with clients on problems arising in the service and provide experimental design guidelines as well statistical data analysis advice.

06/2015–08/2015 **Simons Center for Data Analysis at Simons Foundation**, *New York*, Research Intern.
- Worked on modeling adaptive dimension reduction of neuron computing under the supervision of Dmitri Chklovskii.

04/2013–08/2013 **INRIA Lear-Project-Team**, *Grenoble, France*, Research Intern.
- Worked on "Fast and Robust Archetypal Analysis for Representation Learning" under the supervision of Julien Mairal and Zaid Harchaoui.
- This work was published at CVPR 2014 and was the focus of an open-source software package released in C++. Code is included in SPAMS package.

07/2012–09/2012 **Playsoft Group**, *Paris, France*, Software Engineer Intern.
- Interface design and iOS project development.

Teaching Experiences

09/2016–present **Department of Statistics, University of California, Berkeley**, Graduate Student Instructor.

- Graduate student instructor of **Stat 215A Statistical Models: Theory and Applications**, taught by Pr. Philip Stark. The graduate course in applied statistics focuses on scientific questions and issues that can be addressed using statistics.

01/2016–06/2016 **Department of Statistics, University of California, Berkeley**, Graduate Student Instructor.

- Graduate student instructor of **Stat 135 Concepts of Statistics**, taught by Pr. Helmut Pitters.

01/2015–06/2015 **Department of EECS, University of California, Berkeley**, Graduate Student Instructor.

- Teaching assistant of **CS 280 Computer Vision**, taught by Pr. Jitendra Malik.

Awards

Best research internship prize **Research Internship of École Polytechnique**, *France 2013*, awarded based on research internship achievements at INRIA.

Second Prize **9th International Mathematics Competition for University Students**, *Bulgaria 2012*.

Silver Medal **ICPC Southwestern Europe Regional Contest (Programming Contest)**, *Spain 2012*.

Skills

Programming skills Python (familiar with sklearn and Tensorflow packages), C++ (familiar with OpenCV library, BLAS/ATLAS library and Caffe package), R, Matlab and Java

Languages Native in Mandarin Chinese, fluent in English & French, basic knowledge of German.

Selected Course Projects

CS280 **Computer Vision**, *Course Project: Automated Panoramas from Multiple Photos of Multiple Subjects via Spectral Clustering*.

STAT241A **Statistical Learning Theory**, *Course Project: Nonparametric Bayesian Model for Sparse Nonnegative Matrix Factorization*.

EECS227C **Optimization for Modern Data Analysis**, *Course Project: Convex Formulation for Approximate Convex-hull Identification*.

Publications

[1] Y. Chen, J. Mairal, and Z. Harchaoui, "Fast and robust archetypal analysis for representation learning," in *Computer Vision and Pattern Recognition (CVPR)*, IEEE, 2014.

[2] Y. Chen, C. Pehlevan, and D. B. Chklovskii, "Self-calibrating neural networks for dimensionality reduction," *Submitted to Asilomar Conference*, 2016.