

Yuchao Liu

CONTACT INFORMATION	8950 Costa Verde Blvd Apt 4240 San Diego, CA, 92122	(858)405-7431 yul085@ucsd.edu
OBJECTIVE	Seeking for a full time position in research, statistics, data science or machine learning utilizing my skills and experiences in statistics research and application.	
RESEARCH INTERESTS	Statistics theory, computational statistics, anomaly detection and localization, statistical testing	
EDUCATION	University of California, San Diego , La Jolla, CA Ph.D., Mathematics with Statistics Concentration , Sept 2013 - Present <i>Expected:</i> Feb 2018 Thesis Topic: <i>Essays on Submatrix Detection and Localization</i> Candidacy Oral Test Title: <i>Bisecting Block Models</i> Advisor: Ery Arias-Castro, Ph.D. School of Management, Fudan University , Shanghai, China M.S. Studies, Probability and Mathematical Statistics , Aug 2013 Advisor: Xinsheng Zhang, Ph.D. B.S., Statistics , Jul 2011 Thesis: Semiparametric Bayesian Regression of Binary Response Model via Mixture of Dirichlet Processes Advisor: Qinfeng Xu, Ph.D. Stanford University , Stanford, CA Exchange student at Statistics Department, Summer, 2011	
RESEARCH EXPERIENCE	Research Assistant Department of Mathematics, UC San Diego Supervisor: Ery Arias-Castro, Ph.D.	Mar 2014 to present
PUBLICATIONS	1. Arias-Castro, E. and Liu, Y. “ Distribution-free Detection of a Submatrix ” Journal of Multivariate Analysis 156 (2017): 29-38.	
PAPERS IN PREPARATION	1. Liu, Y. and Guo J. “Distribution-Free, Size Adaptive Submatrix Detection with Acceleration” 2. Liu, Y. and Arias-Castro, E. “A multiscale scan statistic for adaptive submatrix localization”	
TALKS AND PRESENTATIONS	1. Southern Cal Machine Learning Symposium, USC 2. Amazon Graduate Research Symposium, Seattle 3. Southern Cal Machine Learning Symposium, Caltech 4. Dept of Statistics, Fudan University, Shanghai, China 5. Food For Thought Seminar, UC San Diego	Oct. 2017 Jan. 2017 Nov. 2016 Sept. 2016 May. 2016

AWARDS	Student Awards — UC San Diego	
	James B. Ax Fellowship	2013
	Student Awards — Fudan University	
	People's Scholarship	2007–2013
	New Graduate Student Fellowship tier 1	2011
	Class 88' Fellowship for Outstanding Graduates in Statistics	2011
	Huo's Scholarship for Stanford Exchange Students	2011
TEACHING EXPERIENCE	Teaching Assistant	Oct 2013–Present
	Department of Mathematics, UC San Diego Have been the teaching assistant for courses from freshman calculus to PhD level probability and statistics. Ref: Teaching Page of my website	
WORKING EXPERIENCE	Research Intern , Mitsubishi Electric Research Lab, Cambridge, MA	Jun 2017 – Sept 2017
	Supervisor: Emil Laftchiev, Ph.D.	
	Design and implement algorithms for problems in time series data analysis	
	Assist in preparing manuscript and publishing research results	
	Biostatistics Intern , BioMarin Pharmaceutical, Brisbane, CA	Jun 2016 – Aug 2016
	Supervisor: Gordon Sun, Ph.D. and Xinqun Yang, Ph.D. Help solving biostatistics problems in the process of drug development and result illustration Assist biostatisticians with data modeling and creating effective statistics methodology	
OTHER INFORMATION	Programming Skills	
	Python, R, Julia, Minitab, \LaTeX , SAS, C++	
	Membership	
	Institute of Mathematical Statistics	
	American Statistical Association	
	International Chinese Statistical Association	
	Certificates	
	Passed P/FM/MLC/MFE/C and all VEE courses, Society of Actuaries	
	Language Skills	
	Fluent: Chinese, English; Basic: Japanese	
REFERENCES	Ery Arias-Castro	
	Professor of Mathematics	Phone: 858-534-0584
	Department of Mathematics	E-mail: eariasca@ucsd.edu
	University of California San Diego	
	Jelena Bradic	
	Assistant Professor of Mathematics	Phone: 858-534-3992
	Department of Mathematics	E-mail: jbradic@ucsd.edu
	University of California San Diego	
	Kamalika Chaudhuri	
	Associate Professor of Computer Science and Engineering	Phone: 858-822-7703
	Department of Computer Science and Engineering	E-mail: kamalika@cs.ucsd.edu
	University of California San Diego	

Emil Laftchiev
Research Scientist
Data Analytics Group
Mitsubishi Electric Research Laboratories

Phone: 617-621-7514
E-mail: laftchiev@merl.com