

Jieru Shi

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EDUCATION	University of Michigan , Ann Arbor, MI, USA <i>Master of Science</i> , Biostatistics 2018.9-present	GRE: 329/340
	Sichuan University , Chengdu, Sichuan, China <i>Bachelor of Science</i> , Statistics 2014.9-2018.6	Aggregate 87.8%
	Renmin University of China , Beijing, China <i>Visiting student</i> , Statistics 2017.9-2017.12	
	City University of Hong Kong , Hong Kong, China <i>Exchange student</i> , Statistics 2016.1-2016.5	GPA: 3.9/4.0
TECHNICAL SKILLS	Languages : Python, R Database : MySQL Familiar : Matlab, SAS, SPSS	
WORK EXPERIENCE	NATIONAL INSTITUTION OF DRUG CLINICAL TRIAL LAB <i>Data Analyst, Beijing, China</i>	2017.9 2018.1
	<ol style="list-style-type: none">1. Participated in researching bioequivalence of the generic drug. Gave a presentation of the modified hypothesis F testing for bioequivalence.2. Participated in researching whether the different constituents of intestinal flora are the main reason for occult blood in fecal samples. Conducted cluster analysis, principal coordinate analysis and variance analysis on data.	
	JD.COM <i>Data Analyst, Shanghai, China</i>	2016.5 - 2016.8
PROJECTS	<ol style="list-style-type: none">1. Used SQL to acquire sales data (daily sales, net profits, etc.) of maternal and child products daily.2. Worked on a project tracking the shopping behaviors of customers, and thus optimizing the item recommendation system.3. Completed Chinese Market Analysis Report of Maternal and Child Products independently, which analyzed the features and trends of online maternal and child products shopping websites.	
	the PROMETHEUS Project <i>Prof. Alfred Hero, EECS, University of Michigan</i>	2019.2 - 2020.1
	<ol style="list-style-type: none">1. Validated the method from <i>An unsupervised transfer learning algorithm for sleep monitoring</i> on the Biochronicity dataset.2. Came up with an innovative multi-stage study design that predicts infection status in real time to help participants make informed decision on receiving clinical consultations.3. Tentative plan: Include Reinforcement Learning framework to optimize decision policy.	
	Bayesian Mediated Model on fMRI Data <i>Prof. Jian Kang, Biostatistics, University of Michigan</i>	2019.5 - 2019.8
	<ol style="list-style-type: none">1. Participated in pre-processing fMRI data from Adolescent Brain Cognitive Development Study (ABCD Study).	

2. Established a set of Bayesian mediated models to characterize how exposure of interest will directly influence the outcome of interest as well as how this effect is mediated by brain functions.
3. Implemented simulation for the model's posterior sampling.

A Review of Variable Selection Methods in High-Dimensional Data

Prof. Yang Weng, Statistics, Sichuan University

2018.3-2018.6

1. Summarized several typical high-dimensional data variable screening methods proposed in recent years such like Lasso, Ridge Regression, Elastic Net, Adaptive Lasso, SCAD.
2. Presented the definition of ultra-high-dimensional data and briefly explained the basic principle of Sure Independent Screening method.
3. Used the classic microarray data Leukemia-ALLAML to compare the performances of the above variable selection methods.

AWARDS

• 2016 Mathematical Contest in Modeling

Honorable Mention

group leader

• 2017 Mathematical Contest in Modeling

Meritorious

group leader

RELEVANT COURSES

- Statistical Inference (BIOSTAT 601 & 602)
- Statistical Signal Detection and Processing (EECS 564)
- Machine Learning (EECS 545)
- Multivariate Analysis
- Linear Models (BIOSTAT 650)
- General Linear Models (BIOSTAT 651)
- Advanced Calculus
- Advanced Linear Algebra
- Time Series
- Survival Analysis (BIOSTAT 675)
- Bayesian Statistics (BIOSTAT 682)

LANGUAGE

- Chinese
- English

ADDITIONAL ACTIVITIES

- Youth Volunteer Association of Sichuan University 2014.9 - 2016.8
- Biostatistics Student Association 2019.9 - 2020.4
- Biostatistics Peer Mentor Committee 2019.9 - 2020.4