Jiuchen Zhang

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Research interests

Dependent tensor method, Recommender systems, Biostatistics, Wearable Devices Data

Education

2020 - Present University of California Irvine - Irvine, CA

PhD in Statistics

Mentor: Professors Annie Qu

2016 – 2018 University of Illinois at Urbana-Champaign – Champaign, IL

Master of Science in Statistics

2012 – 2016 **Zhejiang University** – Hangzhou, Zhejiang

Bachelor of Science in Mathematics and Applied Mathematics

Academic appointment

2020 - Present Teaching Assistant, Department of Statistics, University of California Irvine

2020 Research Assistant, Department of Statistics, University of California Irvine

Publications

2021 A Tensor Factorization Recommender System with Dependency

Jiuchen Zhang, Yubai Yuan, Annie Qu.

Submitted.

Research experience

Jan. 2018 - Apr. States of Engaged Awareness about Health Inequalities Project

2018 Mentor: Professor Liliane Windsor (UIUC).

Designed a more concentrated questionnaire based on 79 questions by executing exploratory factor analysis

Applied different clustering methods in R to divide 515 participants into 6 different groups and tested if they fit 6 hypothesized categories provided by client. Methods include Latent Class Analysis, random forest clustering

Apr. 2017 - **GWAS for Post-Traumatic Stress Disorder**

June 2017 Mentor: Professor Dave Zhao (UIUC).

Conducted a series of GWAS to identify SNPs associated with overall symptom severity and symptom cluster sub-score severity based on a sample from DNHS, constituting 778 individuals and 688,890 SNPs using PLINK

One loci achieved genome-wide significance in Avoidance and Numbing Symptom model which can be helpful in develop treatment

Working experience

May 2019 — The Illinois Statistics Office (Consultant) – Champaign, IL

Dec. 2019 Provided advice and collaboration for the statistical components of grant proposals including power analysis, identification of appropriate statistical methodology, data management and statistical report writing

Developed targeted statistical methods as well as providing established, best-practice analysis using various analysis tool including Python, R and SAS.

Finished quality control of biomedical data analysis plan and SAS code

Sep. 2018 — Technical Consulting & Research, Inc. (Statistical Analyst) – Weston, CT

May 2019 Scraped contact information of every trial for a disease using package Selenium and Beautiful Soup and downloaded other information through URL parameters using Python

Merged scraped data and downloaded data and applied data process to deal with records having multiple locations or multiple contacts and added latitude and longitude column given location column of downloaded data

Talks

Sep. 2021 A Tensor Factorization Recommender System with Dependency

Invited talk, 2021 ICSA Applied Statistics Symposium

Aug. 2020 Multilayer recommender systems using with dependent via tensor 2020 Joint Statistical Meetings (JSM)

Technical skills

Programming languages

Proficient in: R, Python

Familiar with: Matlab, SQL, SAS, C, C++, Microsoft Office, Tableau, AWS