Jingyi Tang

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EDUCATION

Columbia University in the City of New York, New York City, NY   Expecting May 2021

Master of Science, Biostatistics, Statistical Genetics track

- Course Highlight: Data Science I (tidy data), Biostatistical Methods I & II (logistic, linear mixed, lasso regression models), Statistical Inference, Statistical Genetic Modeling (common clustering algorithms), Advanced Statistical and Computational Methods in Genetics and Genomics
- GPA: 3.82/4.00

The University of Iowa, Iowa City, IA   May 2018

- GPA: 3.77/4.00
- Dean's List: June 2014 – May 2018

Bachelor of Science, Statistics, Mathematical track

- Course Highlight: Calculus, Linear Algebra, Statistical Methods and Computing (SAS and MATLAB), Bayesian Statistics (MCMC), Experimental Design and Analysis, Applied Linear Regression, Mathematical Statistics I & II, Computer Science I (Python)

Bachelor of Arts, Asian Language and Studies, Japanese

WORK & INTERNSHIP EXPERIENCE

Teaching Assistant   August 2020 – Present

Columbia University in the City of New York, New York City, NY, USA

- Assist and mentor students in groups and on an individual basis for Introduction to Biostatistical Methods and Relational Databases and SQL Programming
- Communicate with students through emails and hold weekly office hours for Q&A sessions as well as review sessions

Research Assistant   June 2020 – Present

Memorial Sloan Kettering Cancer Center, New York City, NY, USA

- Search, categorize and write literature summary by focused interests in the assigned topics
- Work and collaborate on the handling effect and normalization methods of gastric cancer and sarcoma data from TCGA and collaborators
- Attend weekly group meetings and communicate with members on related topics
- Utilize R mainly with tidyverse, precision, TCGAbiolinks, Bioconductor packages to tidy, normalize and conduct analysis on TCGA dataset

Instructor   January 2019 – Present

New Chanel, Changsha, Hunan, China

- Taught and facilitated 25-people daily classes and one-to-one individual sessions for GRE verbal courses, A-level courses, and AP courses in Statistics, Mathematics, Calculus, Computer Science and Economics
- Aided program director to develop systematic evaluation questions and lesson planning

Data Analyst   September 2018 – December 2018

Hunan Television, Changsha, Hunan, China

- Analyzed, evaluated and examined data on real-time Nielsen ratings to deliver analysis and reports
- Communicated and counseled with customers as well as supervisors on the advised prices predicted by logistic regression model for different commercials
- Incorporated R into the data analysis process which enhanced the efficiency by about 20% compared to the old method

Supplemental Instruction Leader   August 2016 - May 2018

Academic Resource Center, University of Iowa, Iowa City, IA, USA

- Mentored and led students to gain a deeper understanding of the subject which resulted in a 0.33 increase in GPA on average
- Designed and facilitated the collaborative learning activities for small groups as well as large groups of students for 3 sessions per week during each semester
- Assisted the hiring process of perspective Supplemental Instruction leaders by interviewing candidates
- Completed monthly and biweekly administrative tasks on a time basis, such as attending meetings and writing a lesson plan

Tippie Learning Coach Lead Tutor   January 2016 – May 2018

Tippie College of Business, University of Iowa, Iowa City, IA, USA

- Aided program supervisor, other tutors, and faculty with biweekly outreach communications and meetings
- Tailored Tippie Learning Coach experience to be a student-centered academic support program for larger lectures that contained over 300 students each semester
- Modified and inspected the regulations for tutors as well as supervisors in the Tippie Learning Coach program
- Empowered fellow tutors on redirecting questions and enhancing students' performance by holding a workshop on the subject
- Boosted the performances and grades of tutees

TEAM & INDIVIDUAL PROJECT
Exploring Vague Priors on a Variance Component in an LME Model
- Followed up with Brain Smith's research on PET images of cancer patient neck and head to investigate the influence of vague priors and the problem of how operators affect the average of the measurements
- Programmed and test ran in OpenBUGS and R with different priors for the variance component
- Present the findings in the form of an oral presentation and a written report

Epigenome-wide Association Studies between DNA Methylation and Gastric Adenocarcinoma
- Tidied and prepared data from The Cancer Genome Atlas database on Gastric Adenocarcinoma
- Programmed in R using methods such as Principle Component Analysis to filter noise covariates, K-means Clustering to identify population substructure and association test to explore genes that associate with the onset of gastric cancer
- Used RMardown to draw conclusions based on the numerical results, deliver the result in visual aids, and interpreted the findings in the project to write a written report

SKILLS
R, SQL, SAS, OpenBUGS, Python, Microsoft Word, PowerPoint, Excel, Access
Fluent in Chinese, English, and Japanese