

# Yimeng SHANG

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<https://ys3298.github.io/>

## Education

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Columbia University in the city of New York (M.S. in *Biostatistics, Theory and Methods*) GPA:4.0/4.0  
08/2019 – Expected 05/2021

East China Normal University (B.S. in *Mathematics and Applied Mathematics*) 09/2015 - 06/2019

International Study Program, University of California, Berkeley (*Math & Stat*) 08/2017 - 05/2018

## Internship Experience

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Eli Lilly China Shanghai, China

*Intern Data Sciences & Solutions* 09/2018 – 06/2019

- Support data management work in clinical trials under supervision of China DSS team and participate in the discussion of statistical methods applied for process design of clinical trials
- Perform consumer data mining via R, business impact analysis and quantitative analysis of possible interference risks during clinical trials and organization operation

## Research\Project Experience

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### Gender Pay Gap Claims by Female Doctors at Houston College of Medicine

*Course Project* 12/2019

- Use R to visualize the given data and realize multiple linear regression to quantify associations between salaries and gender as well as any other covariates included in the data
- Test confounders and interaction terms between gender and other covariates to build to final model and do related stratification analysis

### The Suicide Rate Project

*Course Project* 11/2019 – 12/2019

- Use R to produce time-based graphics indicating number of suicide cases related to multiple risk factors based on the gathered data from different source and realize multiple linear regression to find the main effect
- Make a Crude Suicide Rate map allowing users to toggle between different years and choose gender, demonstrating the changes in the suicide rate over time and visualize regional differences across the U.S.

### Dynamics of Ebola Transmission

*Independent Study, Advised by Professor Ping BI* 10/2018 – 06/2019

- Use R to produce time-based graphics indicating number of infections, death toll and infectious victims based on infection cases and death data and realize function fitting via linear regression
- Describe Ebola outbreak with SEIR dynamic system model, studied existence and stability of balance point with MATLAB and verify solution stability in the method of numerical simulation

### Statistical Methods in Medical Research and Development

*Independent Study, Advised by Professor Jin XU* 08/2018 – 09/2019

- Referred to medical research papers concerning medicines from top 10 pharmaceutical companies around the world and write summaries of the adopted statistical methods
- Attend weekly seminars related to statistical methods of medical journals for clinical trials

## Additional Information

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**Computer Skills:** R, SAS, MATLAB, SPSS, Python, C++, Microsoft Office Access, Excel