

# Fei Sun

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## EDUCATION

### Columbia University in the City of New York

*Master of Science in Biostatistics*

### University of California, Davis

*Bachelor of Arts in Statistics, Major GPA: 3.52/4.00*

*Bachelor of Arts in Economics*

- **Selected Courses:** Linear Algebra, Game Theory, Introduction to Programming, Applied Times Series Analysis, Analysis of Categorical Data, Discrete Math for CS, Applied Statistical Methods, Mathematical Statistics
- **Computer Skills:** SPSS, R, Python

## PROFESSIONAL EXPERIENCE

### Tongde Hospital of Zhejiang Province

*Remote Biostatistics Intern*

**Beijing, China**

Oct.2020 – Mar. 2021

- Cleaned massive clinical data and participated in clinical researches of the First Intensive Care Unit (ICU)
- Assisted in a project to investigate the effectiveness of integrated care intervention on the prevention of incontinence associated dermatitis(IAD) in ICU
- Helped the cohort selection of 80 patients in ICU of the hospital and conducted random experimental design
- Compared the incidence of IAD, healing time and nursing time between two groups by SPSS
- Discussed whether the integrated care intervention could help reduce the incidence and healing time of IAD in ICU as well as improve the nursing effectiveness and satisfaction

### China Reform Holdings Corporation, Ltd.

*Industrial Research Intern, Financial Business Division*

**Beijing, China**

Jun.2020 – Sep. 2020

- Collected and analyzed information of the pharmaceutical industry, sorted out important information data sources of the industry, focused on the topics of data quality of domestic and foreign industries, characteristics and comparison of various databases
- Wrote industrial research reports which were delivered to the firm

### EtainPower (Intel Grids, Inc)

*Data Analyst Intern*

**California, USA**

Aug.2019 – Sep. 2019

- Wrote 12-pages report on the global renewable energy industry, covering industry trends, the core participants, market distribution and core participants' critical financial performance data such as sales, profits and growth
- Helped collect data for the company to apply blockchain technology to enable crypto trading in the energy industry
- Researched current cross-border e-commerce market key figures and platforms in USA, Canada, and China
- Crawled related data via Python to estimate the market trend

## RESEARCH AND PROJECT EXPERIENCE

### Analysis of Infection Sites and Trends of COVID-19 Patients

*Group Project, Leader*

**Beijing, China**

Aug. 2020 – Dec.2020

- Investigated the COVID-19 epidemic trends in Asia and Europe and discovered the region-specific infection factors
- Compared to the homogeneity and heterogeneity between COVID-19 and SARS in the epidemiology perspective, i.e., confirmed case number changing curve and infection factors.

### Impact of COVID-19 on Poverty and Food Security

*Individual Project*

**Beijing, China**

Aug. 2020 – Oct.2020

- Reviewed the paper about the impact of infectious diseases in developed, developing and developing countries
- Analyzed the impact of COVID-19 on food supply and food safety worldwide
- Forecasted the impact of COVID-19 on the world economy, i.e., unemployment and poverty levels.

### Predict Temperature Anomalies by Time Series Model

*Individual Project*

**California, USA**

Mar. 2020

- Employed ARIMA model for conducting time series analysis on annual temperature anomalies data in the Northern Hemisphere (1850-2019) by R
- Predicted the temperature anomalies data of the next 6 years and evaluated the prediction by plotting against the ground truth

### Analysis of Categorical Data Project

*Course Project*

**California, USA**

Jan.2020 – Feb. 2020

- **Ischemic heart disease project:** Used Python to capture the data of users claiming for ischemic heart disease during 1998 to 1999 from health insurance company, carried out Poisson regression analysis method and analyzed data by R
- **Low birth-rate project:** Investigated whether the probability of low birth weight is related to its mother's health information by R to conduct Logistics regression analysis
- **Mortality rates project:** Studied relationship between mortality rates in different countries and other variables (education, wealth, SO2, etc.) by using linear regression analysis, utilized R to analyze data

### Overpopulation Research and Sustainable Development

*Course Project*

**California, USA**

May 2019

- Analyzed the impact of overpopulation on global sustainability and explored the feasibility of sustainable development in developing countries by case study of overpopulation in Haiti