

Mengfan (Natalie) Luo

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EDUCATION

Columbia University in the City of New York Mailman School of Public Health

09/2021 - Present

- M.S. candidate in Biostatistics with a concentration in Public Health Data Science

The Chinese University of Hong Kong, Shenzhen School of Life and Health Sciences

09/2017 - 05/2021

- B.S. in Bioinformatics (Overall GPA: 3.227/4.0)
- Coursework focuses on bioinformatics, statistics, and computer science

University of British Columbia (UBC) Faculty of Medicine

06/2019 - 08/2019

- Summer program with course taken: Data Science Applications in the Medical Sciences (A+), Systems Pathophysiology (A)

EXPERIENCES

BridgeOne Capital

04/2021 – 07/2021

Investment Associate

- Performed primary and secondary research and various analyses on biomedical industry and related companies to support investment decision-making
- Assisted senior analysts with the preparation of presentations using PowerPoint
- Supported the team with preparation of offering memoranda, proposals and other written materials for meetings with clients

Kaggle Research Code Competition:

09/2020 – 12/2020

Predict the Mechanisms of Action (MoA) of Drugs

Won a silver medal with group final rank 129/4383 (top 3%)

- Processed a large-scale dataset (23814 samples with 876 features) using Python Pandas dataframe
- Conducted exploratory data analysis and feature engineering on the raw data
- Tuned parameters for multilabel classification models including convolutional neural networks (CNN) and Tabnet

Warshel Institute for Computational Biology

02/2019 – 12/2020

Advisor: Prof. Huang, Hsien-Da

Undergraduate Research Assistant

- Participated in three bioinformatic research project and published two research paper on Nucleic Acids Research (IF 16.971) as co-author.
- Conducted the wet-lab experiments including cell culture, in vitro drug treatment test and RNA extraction
- Using various data analytic tools including Excel, R and some online Bioinformatics platforms to process, analyze and visualize experiment data
- Assisted in data entry and information updates of two bioinformatics database *MiRTarBase 2020 Database* and *MethHC 2.0*

SKILLS

- Familiarity with Python and R
- Familiarity with bioinformatic analysis including differential gene expression analysis
- Familiarity with biological experimental skills including cell culture and nucleic acid extraction
- Familiarity with Microsoft software including Excel and PowerPoint

SOCIAL SERVICES & ACTIVITIES

BioNature Club 09/2017 - 06/2019

- Designed biology related activities for the club, including biochemistry experiments and popularization of biological science
- Helped with the preparation and organization of the activities with other core members

2018-19 Canadian Women's Hockey League 06/2018 - 09/2019

- Participated in 1-year ice skating and ice hockey trainings before the League and obtained a certificate of Level 3 (junior level) National Ice Hockey Referee of China
- Worked as off-board referee during the League, jobs including timing, data recording and on-site coordination