WILLIAM PANG

 $\ \, \bigcirc \,$ github.com/williampangbest
1 $\ \, \bigcirc \,$ https://observablehq.com/@williampangbest
1 $\ \, \bigcirc \,$ william.pang@yale.edu $\ \, \bigcirc \,$ New Haven, Connecticut, United States
 $\ \, \bigcirc \,$ (630)-506-2842

EDUCATION

Yale University, USA

Sept 2021 - May 2023 (Expected)

Master of Public Health, Epidemiology of Microbial Diseases

Public Health Modelling Concentration

McGill University, Canada

Sept 2015 - Dec 2020

Bachelor of Engineering (Bioengineering)

SKILLS

Languages: English (Native), Cantonese (Native), Mandarin (Professional Fluency)

Software & Tools: Programming Languages: C++, Python

Website Development: HTML, CSS Numerical Software: MATLAB, R Database Software: SQL, PostgreSQL

RESEARCH EXPERIENCE

Data Science/ML Intern

Nightingale Open Science

- Assist with curating X-Ray images for the diagnosis of COVID-19 patients on custom platform
- Perform machine learning analysis on X-Ray images and compare with physician diagnosis

Graduate Student Researcher (Data Science), Yale School of Public Health Sept 2021 - Present Ted Cohen Lab (PI: Ted Cohen)

- Conducting internal model validation using R and SQL for the COVIDestim project, an online tool which employs in-house statistical models to predict current COVID cases using reported case and death data
- Assisting in the development and implementation of a data anomaly detector using Hidden Markov models

Research Assistant, McGill University

May 2019 - Aug 2021

Stem Cell Bioprocessing Lab (PI: Corinne Hoesli)

- Developed antibody-modified microcarriers that are used for the selective capture and expansion of stem cells
- Investigated the interaction between mesen chymal stem-cell and custom-developed surfaces in the context of stem-cell the rapy, collaborating with industrial partner Saint-Gobain
- Developed a MATLAB GUI for the analysis of phase-contrast images using wavelet transform techniques

Undergraduate Student Researcher (for Capstone Project)

Sept 2019 - May 2020

Computational Structural and Systems Biology Lab (PI: Yu Brandon Xia)

- Developed a web-based tool for the processing and visualization of select human protein-protein interaction pairs
- Developed website with HTML and CSS, successfully deployed web-based application on Heroku with Flask

AWARDS

- Horstmann Scholarship for Yale School of Public Health (valued at \$30,000), as well as guaranteed Teaching Fellow Position during Second Year (valued at \$4000 per semester)
- Summer Undergraduate Research in Engineering Award (Summer 2019, 2020), funded by National Science and Engineering Research Council of Canada and the Faculty of Engineering at McGill University (valued at \$5625 per summer)

WRITING

Published on the New York Times, the Atlantic, the Washington Post, the Walrus, the Globe and Mail, and more. A comprehensive list of my writing can be found here.