Kuan-Hung (Peter) Yeh

HEALTH DATA SCIENTIST

Data scientist passionates in **Precision Medicine** and **Statistical Genetics** pursuing M.S. in Biostatistics at UCLA. **3**+ years of hands-on research experience working with domain experts in national laboratories, universities, and hospitals. Turning data into actionable insights to improve public health & decision making.

Programming Languages & Computing Skills: R (Markdown, Shiny), Python, Linux, SQL, Git/GitHub Research Topics: Statistical Genetics, Survival Analysis, Precision Medicine, Machine Learning.

EDUCAITON

University of California, Los Angeles (UCLA)

Los Angeles, CA

Master of Science in Biostatistics

Jun. 2023 (Expected)

Selected Courses: Mathematical Statistics, Causal Inference, Machine Learning, etc (Current GPA: 3.9/4.0)

National Taiwan University (NTU)

Taipei, Taiwan

Bachelor of Science in Public Health

Jun. 2020

- Honor Graduate w/ Elite Scholarship & Dr. KP Chen Memorial Scholarship (Overall GPA: 3.75/4.0)
- Selected Courses: Linear Algebra, Survival Analysis, Computational Biology, Epidemiology

RESEARCH EXPERIENCES

Foundation Medicine, Inc. (Affiliate of Roche Group)

Boston, MA

Biostatistician Intern, Advisor: Dr. Chang Xu

Jun. 2022 - Sep. 2022

- Launched new acceptance criteria for reproducibility in diagnostic assay precision study to maximize statistical power while controlling type I error [R Shiny App]
- Proposed new quality control (QC) criteria for new reagent in **FoundationOne**® **Liquid CDx** (F1LCDx) to minimize index hopping effect

Department of Pathology and Laboratory Medicine, UCLA

Los Angeles, CA

Graduate Student Researcher, Advisor: Prof. Bogdan Pasaniuc

May. 2022 - Present

- Constructing a disease risk prediction model by combining polygenic score and electronic health record
- · Developing a well-validated model included individual polygenic score uncertainty for risk prediction

Biostatistics & Bioinformatics Core lab, NTU

Taipei, Taiwan

Undergraduate Researcher, Advisor: Prof. Tzu-Pin Lu

Jun. 2019 – Feb. 2020

- Constructed the **First Prognostic Model** for Asian Colon Cancer Patients [Paper Link]
- Validated the model discrimination and calibration with Harrell's c-index > 0.8
- Provided the robust overall survival/risk prediction to facilitate clinical shared decision making
 - Best Topic Research Poster Award in Research Symposium, NTU [Poster Link]

Taichung Veteran General Hospital

Taichung, Taiwan

Summer Research Intern, Advisor: <u>Dr. Tzu-Hung Hsiao</u>

Jun. 2019 - Sep. 2019

- Found Novel Genetics Locus on metabolic syndrome using GWAS
- Analyzed and combined phenotype and genotype data to quantify the risk of metabolic syndrome
 - Published and Oral Presented at 2020 IEEE BIBM [Video]

Academia Sinica ("National Academy of Sciences" in TAIWAN)

Taipei, Taiwan

Summer Research Intern, Advisor: <u>Dr. Da-Wei Wang</u>

Jun. 2018 - Sep. 2018

- Applied Random Forest, SVM, and Neural Network on National Health Insurance data
- Predicted insurance deductibles on Ophthalmology with 83% accuracy [Github Link]

HEALTH DATA SCIENCE RELATED PROJECTS

2018 TMU x MIT (Sana) HIOT Hackathon 1st Prize with \$3,000 USD [News Link]

Taipei, Taiwan

Oct. 2018

- A Hackathon organized by **Taipei Medical University** and Computer Science and Artificial Intelligence Laboratory (CSAIL), **Massachusetts Institute of Technology**
- Proposed an Ultrasound Assisting System based on CNN for real-time auto examination of Internal Hemorrhage in ICU with a 93% accuracy rate