

Yu-En Hsu

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EDUCATION

Master of Public Administration

Dec 2020

Maxwell School of Citizenship and Public Affairs, Syracuse University

Syracuse, NY

- Certificate of Advanced Study in Data Analytics for Public Policy
- GPA: 3.95/4.00

Bachelor of Business Administration

Jun 2017

Fu Jen Catholic University

Taipei, Taiwan

RESEARCH INTERESTS

Machine Learning, Social Policy, Healthcare, Sustainability, Statistics, Economics, Public Policy, Data Analytics, Data Science, Quantitative Analysis, Geographic Information System, Energy, Environment

EXPERIENCE

Data Scientist

Apr 2021 – Present

Ciba Health, New York City, NY

- Lead design of machine learning workflow and data structure on Amazon Web Service (AWS) Cloud; build predictive models from large sets of healthcare data (medical, claims, Rx, and health metrics)
- Collaborate with business partners on securely transferring personal health information (PHI) across organisations in compliance of HIPAA
- Perform statistical analysis on patient data and translate results into actionable recommendations and reports for non-technical audiences, stakeholders, and colleagues
- Increase efficiency by deploying automation to assist or complete regular tasks; centralise data from multiple sources and design a dashboard to visualise performance metrics

Contributing Writer

Dec 2020 – Present

Towards Data Science, Toronto, Canada

- Publish blog posts, tutorials, and data science projects for 537k+ followers

Consultant

Aug 2020 – Dec 2020

New York State Education Department, Albany, NY

- Developed forecasting model for teacher openings with statistical and machine learning techniques; analysed 1m+ observations with STATA and Python
- Created a user-friendly dashboard to disseminate results and provided documentation with clear instructions for maintenance and update; collaborated with stakeholders, identifying and gathering analytical requirements, expectations, and limitations to guide product design

Data Collector

Jul 2020 – Oct 2020

Global Health 50/50, London, United Kingdom

- Collected disaggregated data (by sex, age, and comorbidities) from WHO reports, official statements, or press releases and provided underlying data for the largest database of sex-disaggregated COVID-19 data

Ajello Research Fellow

May 2020 – Sep 2020

Syracuse University, Syracuse, NY

- Researched Vietnam's electricity supply; collected 500+ power plants' coordinates, fuel types, and capacities from multiple databases; standardised data and published on GitHub with source code and final results

- Modelled air pollution for fossil plants with QGIS; identified locations affecting the most population; drafted policy recommendation for converting to renewable energy sources

Research Assistant

May 2020 – Aug 2020

Open Data Watch, Washington, DC

- Assessed data availability of 101 gender-relevant Sustainable Development Goals' (SDG) indicators; reviewed metadata and methodology; identified proxies and data collection plan for unavailable indicators; published paper on findings
- Monitored national statistics offices' website performance, search engine optimisation (SEO), traffic sources, and users and drafted plans for improving website traffic

Co-Founder and Manager

Jan 2018 – Jun 2019

Biovert Taiwan, Taipei, Taiwan

- Led a marketing team of five; created content and social media advertisement campaign; tracked Facebook and Instagram results with Pixel; analysed results and adjusted parameters to maximise marketing objectives
- Achieved cost per 1,000 impressions (CPM) of €3.07, cost per click (CPC) of €0.31, and click through rate (CTR) of 2.45%, compared to the average of \$11.20, \$1.86, and 0.90%

Marketing Lead

Aug 2016 – Jun 2017

Pourchet, Taipei, Taiwan

- Identified potential partners for the project and put together the partnership as a team leader; communicated between parties to establish a clear understanding of the goals and objectives
- Launched social media accounts and incorporated collaboration tools to ensure accessibility and transparency; created content strategy, monitored competitors' activities, and analysed results and identified areas of improvement

PUBLICATIONS, MEDIA COVERAGE, AND ACADEMIC PROJECTS

Chambers, C. (2020, November 17). Ajello Fellows Create Open Data Repository of Electric Grid in Vietnam. *Syracuse University News*. <https://news.syr.edu/blog/2020/11/16/ajello-fellows-create-open-data-repository-of-electric-grid-in-vietnam/>

Hsu, Y., & Baldi, E. (2020, December 10). *Understanding Usability of SDG National Reporting Platforms*. Open Data Watch. <https://opendatawatch.com/publications/understanding-usability-of-sdg-national-reporting-platforms/>

Predicting contraception use in Asia with machine-learning algorithms
Research project for Predictive Analytics course by Dr Lopoo

Sep 2020 – Dec 2020

The Effect of Government Subsidy Program on Consumer Behaviours
Research project for the Economics of Environmental Policy by Dr Popp

Feb 2020 – Apr 2020

Getting the Best Education in Liberia
Development proposal for International Management and Leadership by Dr Beagles

Sep 2019 – Dec 2019

AWARDS AND SCHOLARSHIPS

Maxwell Dean's Award (\$10,098)
Six-credit tuition scholarship for Fall 2020 semester for academic excellence

Aug 2020

Center of Policy Research Scholarship (\$500)

Aug 2020

Ajello Fellowship (\$2,500)

Aug 2020

Maxwell Dean's Award (\$1,683)
One-credit tuition scholarship for Summer 2020

May 2020

George Schaefer Spring Scholarship (\$1,000)
Award for students interested in sustainability

Mar 2020

SKILLS

- Programming: Proficient in Python and R. Knowledgeable of Google Apps Script, JavaScript, and STATA
- Languages: Fluent in Mandarin (Traditional Chinese), Taiwanese (Minnan/Hokkien), and English

REFERENCES

Dr. Leonard Lopoo

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Dr. Bob Bifulco

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Dr. Pete Wilcoxon

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