## Brian Hsin-Tai Wu

#### **SUMMARY**

A data analytics professional; recently completed the Google Business Intelligence Professional Certificate and Deep Learning Specialization certificate. Proficient in statistical modeling, programming, and data analysis. Strong collaboration and communication skills, with a proven track record of delivering actionable insights to stakeholders. Seeking to leverage expertise in quantitative analysis to drive strategic decision-making and contribute to the success of an organization.

#### **SKILLS**

Programming languages and tools: Python, R, SQL, C++, Linux, Git, AWS, GCP, BigQuery, Tableau, TensorFlow, PyTorch

Domain: Machine Learning, Deep Learning, Quantitative Analysis, ETL, Database, Software Engineering, Financial Engineering

Certifications: Google Business Intelligence Professional Certificate, Deep Learning Specialization, IBM Data Science **Professional Certificate** 

#### **EXPERIENCE**

Research Assistant

#### Research Center for Emerging Viral Infections, Chang Gung University

**Taiwan** 

Aug 2020 – May 2021

- Developed and maintained **R Shiny dashboards** to visualize and track data from laboratory experiments
- Analyzed complex data sets to identify trends and correlations, providing actionable insights for ML model development
- Collaborated with cross-functional teams to gather requirements for government-backed research projects on COVID-19
- Publication: Liu, K., et al. (2022, February). Quantifying Neutralizing Antibodies in Patients with COVID-19 by a Two-Variable Generalized Additive Model. mSphere, vol. 7, no. 1. DOI: 10.1128/msphere.00883-21

**AGTOP Technology, Inc** 

**Taiwan** 

Software Engineer Intern

Jul 2018 - Aug 2018

- Developed chatbots using Node.js and Heroku to provide real-time solutions to customer inquiries
- Implemented NLP-based application to automate text analysis and sentiment analysis on incoming inquiries

## **PROJECTS**

# New York City Bike Share Analysis (Tableau, SQL, GCP, ETL)

Mar 2024

- Extracted data from various public sources into a unified dataset through streamlined processing with Dataflow
- Performed comprehensive requirements gathering, data modeling, and refinement process to ensure the quality of report data using BigQuery
- Developed interactive dashboards and optimized data visualizations using Tableau

# Chicago Property Assessment and Price Prediction (R, Excel, AWS)

Apr 2022

- Utilized AWS EC2 instances and S3 object storage to manage computing capacity and secure the source code and data
- Conducted exploratory data analysis and data wrangling to ensure the quality of the property data
- Implemented gradient boosting model and Lasso regression to predict the market values for new properties

#### **EDUCATION**

# University of Illinois at Urbana-Champaign

Champaign, IL

Master of Science in Finance (Quantitative Finance Specialization)

Aug 2021 – Dec 2022

Coursework: Machine Learning in Finance, Big Data Analytics in Finance, Advanced Data Science and Python for Finance

**Chang Gung University Taiwan** 

Bachelor of Science in Computer Science and Information Engineering

Sep 2015 – Jun 2019

Coursework: Data Structure and Algorithms, Software Engineering, Object-oriented Design, Artificial Intelligence