# Henry, Wai Yin WONG Resume

## **SUMMARY**

Data Scientist with 4 YoE in machine learning (ML), Bayesian statistics, and software development. Researcher, package maintainer, PyCon HK 2024 Speaker, Google PM Certified.

### **WORK EXPERIENCE**

June 2024 - Present

# Associate Data Scientist (non-trainee)

OOCL, Hong Kong

- Develop optimization algorithms for bunker procurement, achieving up to \$5M/yr savings in pilot scope.
- Design and implement Python SDK for Spark data pipelines, develop RESTful API to serve predictions.
- Developed Chatbot web application for internal usage.

Aug 2021 - Present (PT)

#### **Research Assistant**

LIGO Scientific Collaboration, United Status

- Designed a Bayesian framework for ancestral parameter estimation (PE) of black holes (2404.00720).
- Developed statistical models to filter signals, achieving >99% filtering efficiency at a FPR of 0.01 (2112.05932).
- Develop a deep-learning-based method for PE.

Aug 2023 - Jun 2024

### Assistant R&D Engineer

ATAL Engineering Group, Hong Kong

- Developed solutions for fault detection, survival analysis, and HVAC energy optimization using physics-guided ML, achieving up to 20% reduction in electricity consumption.
- Implemented RESTful APIs and integrated with AWS cloud services, and worked on database schema design.

Jun 2022 - Aug 2023

#### **Software Engineer**

Sebit Company Ltd., Hong Kong

- Developed deep learning solutions for object detection and tracking, enhanced accuracy from 93% to 97%.
- Developed data pipeline for IoT sensors, and designed fault detection methods for lifts (Lift Symposium 2023).



# **EDUCATION**

2024 - Present

M.Sc. in Data Science (PT)

The University of Texas at Austin

2018 - 2022

**B.Sc.** in Physics

The Chinese University of Hong Kong

# Side Projects

**SINCE 2023** 

#### archeo

Package for Bayesian ancestral PE (Used by 3 papers, >40k downloads).

**SINCE 2022** 

#### classifier-trains

Package for low-code image classifier training with PyTorch Lightning.

# PUBLIC SPEAKING

**Python User Group 2025**A Taste of MCP Architecture

PyCon HK 2024

Spare Efforts with PyTorch Lightning

**Python User Group 2024** 

Dependency Management (Poetry)

48th Exhibition of Inventions

Intelligent Lift Door Inspector

### SKILLS

**Language:** English / Cantonese / Japanese / Mandarin

**Programming:** Python (main) / SQL / Js / C++ / Go / Bash / Spark

**DevOps:** Docker / ansible / Jenkins / Helm / GitHub Actions / GitLab Cl

Full CV: wyhwong.github.io/cv