

Arthur Ho Wang, Li

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Education

Ph.D. in Natural Environmental Studies

April 2024 - Present

Graduate School of Frontier Sciences, The University of Tokyo (UTokyo), Chiba, Japan; expected: March 2027

Affiliation: Div. of Climate System Research, Atmosphere and Ocean Research Institute, UTokyo

M.Phil in Natural Environmental Studies

April 2022 - March 2024

Graduate School of Frontier Sciences, The University of Tokyo (UTokyo), Chiba, Japan; grade: A

Affiliation: Div. of Climate System Research, Atmosphere and Ocean Research Institute, UTokyo

Thesis: **Retrieval of tropospheric using thermal-IR band of TANSO-FTS-2 on GOSAT-2 satellite**

B.Sc. (Hons) in Earth System Science

August 2016 - August 2021

The Chinese University of Hong Kong (CUHK), Hong Kong SAR; honours: **Second Class Upper Division (2:1)**.

Coursework: Atmospheric Chemistry and Physics, Air Pollution Modelling, Remote Sensing, Climatology

Thesis: **The development of real-time aviation emission model in Hong Kong: the application of Raspberry Pi**

Exchange Programme

September 2019 - August 2020

Keio University (KeioU), Tokyo, Japan; GPA: 3.4/4. Coursework: Business Japanese, Japanese Culture and History

Skills

Language Cantonese (native), Mandarin (native), **English (TOEFL iBT 98)**, **Japanese (JLPT N1)**

Programming **Python** (statsmodels, GeoPandas, BeautifulSoup etc), Fortran, shell, R, C, HTML & CSS

Software Microsoft Office, **Google Earth Engine Code**, ArcGIS Pro, QGIS, VSCode

Computer **Linux**, Cloud services (Azure, AWS, GCP), git, **Network & Security (FE licence by IPA)**

Work and Volunteer Experience

Project Research Assistant

April 2024 - Present

Imasu Laboratory, Atmosphere and Ocean Research Institute, University of Tokyo

- Assisting in OCO-2 CO₂ data collection and data processing for the validation of GOSAT/GOSAT-2 observations.

Open Science Promoter (technical assistant)

October 2023 - March 2024

Open Science Promotion Section, Atmosphere and Ocean Research Institute, University of Tokyo

- Increased 80% work efficiency via Python automation and handwritten Japanese recognition using Google Vision.

Project Research Assistant

July 2021 - March 2022

Hong Kong Chronicles (Natural Environment) – Meteorology Group, Hong Kong SAR

- Organized 8 group meetings and provided technical supports to a group of 6 professors and social leaders.
- Contributed to a peer-reviewed book “Hong Kong Chronicles – Natural Environment (ISBN 978-988-8860-78-4)”.

Voluntary Leader and Tutor

August 2016 - 2021

Kwan Tong Fuk Lam Church, Hong Kong SAR

- Supervised the well-being of a group of 8 boys and girls serving as a mentor and conflict resolution specialist.

Extracurricular Activities

WUN Summer School on Energy Transition

8th-19th July 2019

University of Alberta, Canada

- Represented CUHK to participate in 50 hours of seminars complemented by field trips to renewable energy sites.

Summer Language and Culture Program

7th July-18th August 2018

University of Victoria, Canada

- Attended 180 hours of English based cultural engagement and 6 weeks of advanced English lessons with 81% score.

Major Research Experience

Master's thesis (Dissertation)

April 2022 - March 2024

Div. of Climate System Research, Atmosphere and Ocean Research Institute, The University of Tokyo

Topic: **Tropospheric Ozone (O₃) retrieval over urban areas using thermal-IR band of TANSO-FTS-2 on GOSAT-2**

- Developed novel GOSAT-2 retrieval algorithm with experience of 3 peer-reviewed presentations.

Final Year Project (Dissertation)

September 2020 - May 2021

Earth System Science Programme, The Chinese University of Hong Kong, Hong Kong SAR

Topic: **The Development of Real-time Aviation Emission Model in Hong Kong: the application of Raspberry Pi**

- Developed real-time aviation emission model to estimate CO₂ and PM emissions using Python and Raspberry Pi.

Undergraduate Researcher

September 2019 - August 2020

Environmental Chemistry Lab., Department of Applied Chemistry, Keio University, Japan

Topics: **A Study of Air Pollution in Japan through Simulation and In-situ Measurement Data**

- Developed Land Use Regression (LUR) model by using ArcGIS Pro and R programming to analyse local air pollution.
- Conducted 2-week field measurement to quantify the amount of iron-containing particles in urban air.

Fellowship

Support for Pioneering Research Initiated by Next Generation to Green Transformation (SPRING-GX)

Japan Science and Technology Agency (JST), Japan

April 2024 – Present

- Awarded JPY180,000 per month for outstanding academic achievement, and JPY360,000 per year as research funding.

Awards and Scholarships

Lotte Foundation Scholarship (ロツテ財団奨学金) (JPY180,000 per month)

2023 - 2024

Lotte Foundation, Japan

Ng Siu Mui University Scholarship (HKD20,000 per annum)

2016 - 2021, 2022-2023

Ng Siu Mui Charitable Foundation Limited, Hong Kong SAR

Chung Chi College EYE Award (HKD4,000)

2021

Chung Chi College, The Chinese University of Hong Kong, Hong Kong SAR

Faculty Undergraduate Exchange Scholarship (HKD5,000)

2020

Faculty of Science, The Chinese University of Hong Kong, Hong Kong SAR

CUHK Exchange Financial Aid & Scholarship (HKD59,000)

2019

Faculty of Science, The Chinese University of Hong Kong, Hong Kong SAR

WUN Summer School Funding (HKD25,000)

2019

The Chinese University of Hong Kong, Hong Kong SAR

Outstanding Student Award

2015

The Association of Heads of Secondary Schools of Tsuen Wan Kwai Ching and Tsing Yi District, Hong Kong SAR

Don Bosco Prize (HKD10,000)

2015

Salesians of Don Bosco, Hong Kong SAR

Sir Edward Youde Memorial Prize - Division of Secondary School Students (HKD1,000)

2015

Sir Edward Youde Memorial Fund, Hong Kong SAR