# XINJIE HUANG (he/him/his)

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#### **EDUCATION BACKGROUND**

# M.Phil. (master by research) in Mechanical Engineering

2020-2022

The University of Hong Kong, Hong Kong (supported with full scholarships)

Supervisors: Dr. Jiyun Song and Prof. Yuguo Li

Research areas: urban climate, urban canopy model, land-atmosphere interactions, building

energy model, urban green infrastructure, thermal comfort, urban biometeorology

# B.Eng. in Building Environment and Energy Engineering

2016-2020

**Southeast University**, Nanjing, China (GPA: 3.6/4.0, Grade: 88/100)

Supervisor: Prof. Cong Liu

Research areas: indoor air quality, indoor-outdoor air exchanges, ventilation

#### **ACADEMIC POSITIONS**

#### **Research Assistant in School of the Environment**

2021

Yale University, New Haven, CT, USA

Advisor: Prof. Xuhui Lee

Research project: Biking for science and health (https://biking-for-science.yale.edu/)

# **Research Assistant in Department of Building Science**

2019

Tsinghua University, Beijing, China

Advisor: Prof. Jinhan Mo

Research project: An electrostatic assisted air filter for removing indoor bioaerosols

## **PUBLICATIONS** (\*: Corresponding author; †: Equal contribution)

## First master's year (2020-2021):

- 1. **Huang X.**, Song J.\*, Wang C., Chui TFM., Chan PW. (2021) The synergistic effect of urban heat and moisture islands in a compact high-rise city, *Building and Environment* (IF: 6.456), DOI: 10.1016/j.buildenv.2021.108274.
- 2. Song J.\* (supervisor), **Huang X.**, Shi D., Lin WE., Fan S., Linden PF. (2021) Natural ventilation in London: towards energy-efficient and healthy buildings, *Building and Environment* (IF:6.456), DOI: 10.1016/j.buildenv.2021.107722.
- 3. Du R., Song J.\*, **Huang X.**, Wang Q., Zhang C., Brousse O., Chan PW. (2021) High-resolution regional modeling of urban moisture island: mechanism and implications on thermal comfort, *Building and Environment* (IF:6.456), under review.
- 4. **Huang X.**, Song J.\*, Shi D., Wang C., Chan PW. (2021) Urban climate-human coupling system: model development and case study, manuscript in preparation.

### Undergraduate period (2016-2020):

5. Liu C.\* † (supervisor), **Huang X.** † (**co-first author**), Li J. (2020) Outdoor benzene highly impacts indoor concentrations globally, *Science of the Total Environment* (IF:7.963), DOI: 10.1016/j.scitotenv.2020.137640.

- 6. Liu C.\* (supervisor), **Huang X.**, Zhao Y., Qian H. (2021) A new PM<sub>2.5</sub>-based P-up method to measure building ventilation rate, *Building and Environment* (IF:6.456), under review.
- 7. Xia F., **Huang X.**, Tian E., Mo J.\* (2019) An electrostatically assisted air filter for removing indoor bioaerosols. Paper 609. The 11th International Symposium on Heating, Ventilation and Air Conditioning (ISHVAC 2019), July 12-15, 2019, Harbin, China. 2016YFE0102300-03, 51722807, 51521005.

# HONORS AND AWARDS

Postgraduate Scholarship, the University of Hong Kong, Hong Kong	2020-2022
<b>First Prize</b> as Team Leader in the National University Student Social Practice and Science Contest on Energy Saving & Emission Reduction, Ministry of Education, China	2019
<b>First Prize</b> of Zhongnan Group Enterprise Scholarship, Southeast University, China (Top 10 out of ~16000 students)	2018

### TEACHING EXPERIENCE

Teaching assistant at the University of Hong Kong

2020-2022

Courses: mechanics of fluids; thermofluids; air and noise pollution control and management

### **SOFTWARE SKILLS**

MATLAB, Origin, SketchUp, C++, QGIS, ArcGIS, CAD, EnergyPlus, Fluent