

# XINJIE HUANG (he/him/his)

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## EDUCATION BACKGROUND

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- 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

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- 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)

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### 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](https://doi.org/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](https://doi.org/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](https://doi.org/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.

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## HONORS AND AWARDS

<b>Postgraduate Scholarship</b> , 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

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## TEACHING EXPERIENCE

Teaching assistant at the University of Hong Kong Courses: mechanics of fluids; thermofluids; air and noise pollution control and management	2020-2022
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## SOFTWARE SKILLS

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