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)
Research areas: urban climate, building energy, thermal comfort, natural ventilation, urban green infrastructure, indoor environmental quality, climate-responsive design

B.Eng. in Building Environment and Energy Engineering 2016-2020
Southeast University, Nanjing, China
Cumulative GPA: 3.6 / 4.0, Major GPA: 3.9 / 4.0, Grade: 88 / 100
Research areas: indoor air quality, indoor-outdoor air exchanges, ventilation

JOURNAL PUBLICATIONS (*: Corresponding author; †: Equal contribution)

1. **X. Huang**, J. Song*, C. Wang, T.F.M. Chui, P.W. Chan, The synergistic effect of urban heat and moisture islands in a compact high-rise city, *Building and Environment* (IF: 6.456) (2021) 108274. https://doi.org/10.1016/j.buildenv.2021.108274.

2. J. Song* (advisor), **X. Huang**, D. Shi, W.E. Lin, S. Fan, P.F. Linden, Natural ventilation in London: Towards energy-efficient and healthy buildings, *Building and Environment* (IF: 6.456) (2021) 107722. https://doi.org/10.1016/j.buildenv.2021.107722.

3. R. Du, J. Song*, **X. Huang**, Q. Wang, C. Zhang, O. Brousse, P.W. Chan, High-resolution regional modeling of urban moisture island: mechanisms and implications on thermal comfort, *Building and Environment* (IF: 6.456) (2021) 108542. https://doi.org/10.1016/j.buildenv.2021.108542.

4. **X. Huang**, J. Song*, D. Shi, C. Wang, P.W. Chan, Realistic prediction of pedestrian-level thermal stress in cities via a new urban environment-human coupling system, manuscript in preparation. (This work will soon be presented on the American Meteorological Society's (AMS) 102nd Annual Meeting, Jan. 23-27, 2022.)

5. C. Liu*† (advisor), **X. Huang† (co-first author)**, J. Li, Outdoor benzene highly impacts indoor concentrations globally, *Science of the Total Environment* (IF: 7.963) (2020) 137640. https://doi.org/10.1016/j.scitotenv.2020.137640.

6. H. Hu, C. Liu*, **X. Huang.**, Y. Zhao, H. Qian, A new $PM_{2.5}$-based P-up method to measure building ventilation rate, *Indoor Air* (IF: 5.770) under review.

CONFERENCE PAPERS & PRESENTATIONS (*: Corresponding author)

1. **X. Huang**, J. Song, The synergistic effect of urban heat and moisture islands in a compact high-rise city: mechanisms and mitigation strategies, poster presentation accepted, the AMS's 13th Conference on Environment and Health on 102nd Annual Meeting, Jan. 23-27, 2022, Houston, TX, USA.

2. J. Song, **X. Huang**, Urban climate-human coupling system: model development and case study, poster presentation accepted, the AMS's 13th Conference on Environment and Health on 102nd Annual Meeting, Jan. 23-27, 2022, Houston, TX, USA.

3. F. Xia, **X. Huang**, E. Tian, J. Mo*, 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, AWARDS, AND FUNDING

Postgraduate Scholarship (~56000 USD), The University of Hong Kong, Hong Kong 2020-2022

National First Prize in Energy Saving & Emission Reduction Competition, Ministry of Education, China (Top 2%, team leader, media coverage: Southeast University) 2019

Student Research Funding (~4000 USD) as the student PI in the National Research Training Program for University Students, Ministry of Education, China 2018

First Prize of Zhongnan Group Enterprise Scholarship, Southeast University, China (Top 10 out of ~16000 students, ~2000 USD) 2018

TEACHING EXPERIENCE

Teaching Assistant at the University of Hong Kong (language of instruction: English) 2020-2022

SKILLS

Software: MATLAB, Origin, SketchUp, C++, QGIS, ArcGIS, CAD, EnergyPlus, Fluent
Language: Chinese (native), English (TOEFL: 109, reading: 28, listening: 28, speaking: 25, writing: 28)