Heng Du

Ph.D. in Architecture/ Building Technology
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EDUCATION

- **Shanghai Jiao Tong University, China** 2019.9-2023.9
  Ph.D. in Architecture/ Building Science
  Supervised by Professor **Zhiwei Lian**
- **Hunan University, China** 2016.9-2019.6
  M.E. in Heating, Ventilating and Air Conditioning Engineering
  Supervised by Professor **Changzhi Yang**
- **Xiangtan University, China** 2011.9-2015.6
  B.E. in Building Environment and Equipment Engineering

RESEARCH INTEREST

- Thermal Comfort
- Human Well-being
- Environmental Sustainability
- Smart Buildings
- Data-driven Model

PROJECTS EXPERIENCE

- **Key Researcher for 'Fundamental Parameters for Building Energy Efficiency Design'**
  National Key R&D Program of China (2018YFC0704500), 2018-2021
- **Key Researcher for 'Economic Optimization Model Considering Work Performance and Energy Consumption in Office Environment'**
  National Natural Science Foundation of China (51878405), 2019-2022
- **Key Researcher for 'Key Technologies to Address the Gender Differences in Thermal Comfort based on Measuring Skin Temperature'**
  Project in Collaboration with Midea, 2021-2023

AWARD

- **Outstanding Graduate of Shanghai** (2023)
- **Best Paper Award in Healthy Buildings Asia** (2023)
- **National Scholarship** (2022)
- **Outstanding Scholarship of Shanghai Jiao Tong University** (2021)

PUBLICATIONS

[1]. **Heng Du**, Zhiwei Lian, Dayi Lai, et al. Evaluation of the Accuracy of PMV and Its Several Revised Models Using the Chinese Thermal Comfort Database. **Energy and Buildings** 271 (2022). (SCI, Q1, IF=6.7) https://doi.org/10.1016/j.enbuild.2022.112334

[2]. **Heng Du**, Zhiwei Lian, Dayi Lai, et al. Comparison of Thermal Comfort between Radiant and Convective Systems Using Field Test Data from the Chinese Thermal Comfort Database. **Building and Environment** 209 (2022). (SCI, Q1, IF=7.4) https://doi.org/10.1016/j.buildenv.2021.108685

[3]. **Heng Du**, Zhiwei Lian, Dayi Lai, et al. Method of Determining Acceptable Air Temperature Thresholds in Chinese HVAC Buildings Based on a Data-driven Model. **Energy and Buildings** 241 (2021). (SCI, Q1, IF=6.7) https://doi.org/10.1016/j.enbuild.2021.110920

[4]. **Heng Du**, Zhiwei Lian, Li Lan, et al. Application of Statistical Analysis of Sample Size: How Many Occupant Responses Are Required for an Indoor Environmental Quality (IEQ) Field Study. **Building Simulation** 16.4 (2023). (SCI, Q1, IF=5.5) https://doi.org/10.1007/s12273-022-0970-4

[5]. **Heng Du**, Zisheng Zhao, Junmeng Lyu, et al. Gender Differences in Thermal Comfort under Coupled Environmental Factors. **Energy and Buildings** 295 (2023): 113345. (SCI, Q1, IF=6.7) https://doi.org/10.1016/j.enbuild.2023.113345

[6]. **Heng Du**, and Changzhi Yang. Re-visitation of the Thermal Environment Evaluation Index Standard Effective Temperature (SET) Based on the Two-node Model. **Sustainable Cities and Society** 53 (2020). (SCI, Q1, IF=11.7) https://doi.org/10.1016/j.scs.2019.101899

[7]. Junmeng Lyu, **Heng Du**, Zisheng Zhao, et al. Where Should the Thermal Image Sensor of a Smart A/C Look?-Occupant Thermal Sensation Model Based on Thermal Imaging Data. **Building and Environment** 239 (2023). (SCI, Q1, IF=7.4) https://doi.org/10.1016/j.buildenv.2023.110405

[8]. Xinbo Xu, **Heng Du**, and Zhiwei Lian. Discussion on Regression Analysis with Small Determination Coefficient in Human-environment Researches. **Indoor Air** 32.10 (2022). (SCI, Q1, IF=5.8) https://doi.org/10.1111/ina.13117

[9]. Qiantao Zhao, Junmeng Lyu, **Heng Du**, et al. Gender Differences in Thermal Sensation and Skin Temperature Sensitivity under Local Cooling. **Journal of Thermal Biology** 111 (2023). (SCI, Q2, IF=2.7) https://doi.org/10.1016/j.jtherbio.2022.103401

[10]. Wenjie Ji, Yingxin Zhu, **Heng Du,** et al. Interpretation of Standard Effective Temperature (SET) and Explorations on Its Modification and Development. **Building and Environment** 210 (2022). (SCI, Q1, IF=7.4) https://doi.org/10.1016/j.buildenv.2021.108714

[11]. Ting Cao, Zhiwei Lian, **Heng Du,** et al. A Sleep Staging Model for the Sleep Environment Control Based on Machine Learning. **Building Simulation** (2023). (SCI, Q1, IF=5.5) https://doi.org/10.1007/s12273-023-1049-6

[12]. Ting Cao, Zhiwei Lian, **Heng Du,** et al. Differences in Environmental Perception of Gender and Sleep Quality in Self-regulating Sleep Thermal Environment. **Indoor and Built Environment** 30.9 (2021). (SCI, Q2, IF=3.6) https://doi.org/10.1177/1420326X20961812

[13]. Junmeng Lyu, Jinbo Li, Zisheng Zhao, Xiongwei Miao, **Heng Du**, Dayi Lai, Yuxin Yang, and Zhiwei Lian. How Do People Set Air Conditioning Temperature Setpoint in Urban Domestic–Behavior Model in Chinese Three Climate Zones Based on Historical Usage Data. **Energy and Buildings** 284 (2023). (SCI, Q1, IF=6.7) https://doi.org/10.1016/j.enbuild.2023.112856

[14]. Ting Cao, Zhiwei Lian, Jingwen Zhu, Xinbo Xu, **Heng Du**, and Qiantao Zhao. Parametric Study on the Sleep Thermal Environment. **Building Simulation** 15.5 (2022). (SCI, Q1, IF=5.5) https://doi.org/10.1007/s12273-021-0840-5