Stanford

Jeslu Jacob

Postdoctoral Scholar, Civil and Environmental Engineering

Bio

HONORS AND AWARDS

- Youth changemaker for Individual contribution to decarbonization, ISHRAE (2025)
- Prime Minister's Research Fellowship, Government of India (2019-24)
- Institute Gold Medal, National Institute of Technology Tiruchirappalli (2018)
- Sri. Karchae Endowment Award for Best Thesis, National Institute of Technology Tiruchirappalli (2018)
- Mr. Oisik Adak Endowment Cash Award for creative design, National Institute of Technology Tiruchirappalli (2017)
- Award of Prestige , International Green Building Council (2016)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Publication Team, Council of Architecture, India (2025 - present)
- Voting Member, ASHRAE conference and expositions committee (2025 - present)

STANFORD ADVISORS

- Rishee Jain, Postdoctoral Faculty Sponsor

LINKS

- My webpage: https://sites.google.com/view/jeslucelinejacob

Publications

PUBLICATIONS

- **Case Study Exploring the Influence of Diffuser Arrangement on Air Distribution Using Field Experiments and Computational Fluid Dynamics Simulations** *JOURNAL OF ARCHITECTURAL ENGINEERING*
  Jacob, J., Pandit, D., Sen, J.
  2025; 31 (1)
- **From Innovation to Implementation: Exploring Market Opportunities for MZOCC in the Future of HVAC**
  Jacob, J., Jain, R., ACM
  ASSOC COMPUTING MACHINERY.2025: 482-486
- **Does the Air Conditioner Justify the Comfort of Students?**
  Nandan, P., Jacob, J., Sen, J., ASHRAE
  AMER SOC HEATING, REFRIGERATING AND AIR-CONDITIONING ENGS.2025: 373-382
- **Customizing Micro-Zonal Occupant-Centric Control (MZOCC) Using Digital Twins to Reduce Energy Consumption: A Case Study in a Working Office in India**

Jacob, J., Pandit, D., Sen, J., ASHRAE
AMER SOC HEATING, REFRIGERATING AND AIR-CONDITIONING ENGS.2025: 121-130

- **Protocols for planning micro-zones to facilitate occupant-centric control (OCC) to reduce HVAC energy consumption in Indian open-plan offices** *ENERGY EFFICIENCY*
  Jacob, J., Pandit, D., Sen, J.
  2024; 17 (8)
- **Evaluation of thermal comfort and age of air on employing micro-zonal air-conditioning in an existing open-plan office in India** *SCIENCE AND TECHNOLOGY FOR THE BUILT ENVIRONMENT*
  Jacob, J., Pandit, D., Sen, J.
  2025; 31 (4): 429-465
- **Investigating enhanced thermal comfort and energy efficiency through strategized airflow in Micro-Zonal Occupant-Centric Control (MZOCC)** *ENERGY AND BUILDINGS*
  Jacob, J., Pandit, D., Sen, J.
  2024; 318
- **Developing a validated simulation model of micro-zonal air-conditioning to evaluate thermal comfort parameters** *ARCHITECTURAL ENGINEERING AND DESIGN MANAGEMENT*
  Jacob, J., Pandit, D., Sen, J.
  2025; 21 (2): 289-314
- **A Machine Learning Approach to Benchmark Thermal Comfort**
  Jacob, J., Pandit, D., Sen, J., ACM
  ASSOC COMPUTING MACHINERY.2024: 363-368
- **Energy-saving potential in Indian open-plan offices using Micro-Zonal Occupant Centric Control (MZOCC)** *ENERGY AND BUILDINGS*
  Jacob, J., Pandit, D., Sen, J.
  2023; 282
- **An explorative study on transient cooling pattern and energy efficiency while using micro-zonal occupant-centric control** *ARCHITECTURAL ENGINEERING AND DESIGN MANAGEMENT*
  Jacob, J., Pandit, D., Sen, J.
  2023; 19 (4): 340-359