Stanford



Sneha Jain

Postdoctoral Scholar, Civil and Environmental Engineering

Bio

BIO

I completed my PhD degree at EPFL, Switzerland focused on the influence of eye physiology and color of daylight on human visual comfort under daylight office spaces. I have a background in Architecture and a Master's in Building Science and Information Technology from India, complemented by a research fellowship at the Lawerence Berkeley National Lab (LBNL). I am currently pursuing a postdoctoral fellowship at Building for Well-being lab in the Civil and Environmental Engineering department at the Stanford University. Here, I am working on broader aspects of occupant well being in indoor spaces brought by the natural materials and natural lighting.

HONORS AND AWARDS

- Building Energy Efficiency Higher & Advanced Network (BHAVAN) Fellowships, Indo-US Science and Technology Forum (IUSSTF) (2018)
- Best paper Award, Asia's Building Performance Simulation Association (2018)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Technical Committee member, International Commission on Illumination (CIE) (2020 present)
- Technical Committee member, International Energy Agency (2022 present)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Ecole Polytechnique Federale de Lausanne (2023)
- Bachelor of Architecture, Maulana Azad National Institute of Technology (2015)
- Master of Science, International Institute of Info Tech Hyderabad (2019)
- Ph.D., EPFL, Switzerland, Civil & Environmental Engineering (2023)
- M.S., IIIT-Hyderabad, India , Building Science (2018)
- B.Arch., NIT-Bhopal, India , Architecture (2015)

STANFORD ADVISORS

Sarah Billington, Postdoctoral Faculty Sponsor

LINKS

- Billington Lab: https://www.billingtonlab.org
- LinkedIn: https://www.linkedin.com/in/sneha-jain-22b59510b/

Research & Scholarship

RESEARCH INTERESTS

- Research Methods
- Technology and Education

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Human-centric built environment, Daylighting, Visual comfort

Publications

PUBLICATIONS

- Perceived glare from the sun behind tinted glazing: Comparing blue vs. color-neutral tints *BUILDING AND ENVIRONMENT* Jain, S., Wienold, J., Lagier, M., Schueler, A., Andersen, M. 2023: 234
- Influence of macular pigment on the sensitivity to discomfort glare from daylight. *Scientific reports* Jain, S., Wienold, J., Eandi, C., Gisselbaek, S., Kawasaki, A., Andersen, M. 2023; 13 (1): 18551
- Behind electrochromic glazing: Assessing user's perception of glare from the sun in a controlled environment *ENERGY AND BUILDINGS* Jain, S., Karmann, C., Wienold, J. 2022; 256
- A review of open loop control strategies for shades, blinds and integrated lighting by use of real-time daylight prediction methods *BUILDING AND ENVIRONMENT*

Jain, S., Garg, V. 2018; 135: 352-364

- Comparison of questionnaire items for discomfort glare studies in daylit spaces *LIGHTING RESEARCH & TECHNOLOGY* Quek, G., Jain, S., Karmann, C., Pierson, C., Wienold, J., Andersen, M. 2023
- Transmittance thresholds of electrochromic glazing to achieve annual low-glare work environments *Nordic Building Simulation 2022* Wienold, J., Jain, S., Andersen, M. 2022: 8
- Subjective assessment of visual comfort in a daylit workplace with an electrochromic glazed facade Jain, S., Karmann, C., Wienold, J., Scartezzini, J. L., Smith, B. IOP PUBLISHING LTD.2021
- Circadian lighting in a space daylit by a tubular daylight device Jain, S., Fernandes, L., Regnier, C., Garg, V., IOP IOP PUBLISHING LTD.2019

PRESENTATIONS

- Discomfort glare from daylight: Influence of transmitted color and the eye's macular pigment Bright environments. Daylight in Sustainable Building Design Conference (8/25/2023)
- Does glazing color influence our perception of discomfort glare from daylight? Build for Life, VELUX Daylight Symposium 2021
- What factors influence human visual comfort perception? EPFL, Switzerland
- Glare behind blue (electrochromic) glazing 9th Annual International Radiance Workshop
- Influence of Daylight Spectrum filtered by colored glazing on discomfort glare perception Daylight Academy Annual Conference & General Assembly