

Stanford



Aqsa Naeem

Physical Science Research Scientist
Energy Science & Engineering

Bio

BIO

Aqsa Naeem works in the Department of Energy Science and Engineering at Stanford University. Her research spans various aspects of energy systems, including data-driven modeling of different entities and the design and control of sustainable, energy-efficient systems. Her current work focuses on leveraging data analytics for building energy management, with an interest in creating insights that drive innovation through interactive visualization, modeling tools, and custom dashboard designs.

Naeem obtained her PhD in Electrical Engineering from Lahore University of Management Sciences (LUMS) in Pakistan, where she worked on designing resilient, cost-effective microgrids to promote the adoption of renewable energy in the power sector. Her work emphasizes the importance of using complementary energy sources to mitigate the inherent intermittency of renewable energy.

ACADEMIC APPOINTMENTS

- Physical Science Research Scientist, Energy Science & Engineering

LINKS

- Click to Explore the Energy Analytics Dashboard: <https://unlock-efficiency.bss.design>

Research & Scholarship

RESEARCH INTERESTS

- Assessment, Testing and Measurement
- Data Sciences

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Energy System Modeling and Optimization

Publications

PUBLICATIONS

- **EnergyPlus as a computational engine for commercial building operational digital twins** *ENERGY AND BUILDINGS*
Naeem, A., Ho, C., Kolderup, E., Jain, R. K., Benson, S., de Chalendar, J.
2025; 329
- **Data-driven characterization of cooling needs in a portfolio of co-located commercial buildings** *ISCIENCE*
Naeem, A., Benson, S. M., de Chalendar, J. A.

2024; 27 (7)

- **Data-driven characterization of cooling needs in a portfolio of co-located commercial buildings.** *iScience*
Naeem, A., Benson, S. M., de Chalendar, J. A.
2024; 27 (7): 110398
- **Maximizing the Economic Benefits of a Grid-Tied Microgrid Using Solar-Wind Complementarity** *ENERGIES*
Naeem, A., Ul Hassan, N., Yuen, C., Muyeen, S. M.
2019; 12 (3)
- **Indoor Positioning Using Visible LED Lights: A Survey** *ACM COMPUTING SURVEYS*
Ul Hassan, N., Naeem, A., Pasha, M., Jadoon, T., Yuen, C.
2015; 48 (2)
- **Understanding Customer Behavior in Multi-Tier Demand Response Management Program** *IEEE ACCESS*
Naeem, A., Shabbir, A., Ul Hassan, N., Yuen, C., Ahmad, A., Tushar, W.
2015; 3: 2613–25