Stanford

Aqsa Naeem

Postdoctoral Scholar, Energy Resources Engineering

Bio

BIO

Aqsa Naeem is working as a Postdoctoral Research Fellow in the Department of Energy Resources Engineering at Stanford University. Her research domain encompasses various aspects of the energy systems, ranging from the data-driven modelling of various entities to the design and control of sustainable and energy efficient systems, all with the goal of minimizing the carbon footprint, energy consumption, and operational costs.

Her current work focuses on the use of data analytics in the energy systems to capture the data trends in a structured, ingenious way that can further be used to predict the future energy demand scenarios. Specifically, she is working on the data-driven modelling of heating, ventilation, and air-conditioning (HVAC) systems to identify the thermal response of the actual buildings to various internal and external stimuli.

Naeem obtained her PhD in Electrical Engineering from Lahore University of Management Sciences (LUMS) Pakistan, where she worked on the design of resilient and cost-effective microgrids, to further the adoption of renewable energy systems in the power sector. Her work highlights the significance of using complementary energy sources in order to mitigate the inherent intermittency of renewable energy sources.

STANFORD ADVISORS

- Sally Benson, Postdoctoral Faculty Sponsor

Research & Scholarship

RESEARCH INTERESTS

- Assessment, Testing and Measurement
- Data Sciences

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Energy System Modeling and Optimization

LAB AFFILIATIONS

- Sally Benson, Benson Lab (8/1/2020)

Publications

PUBLICATIONS

- **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