

Job Description: We are looking for a highly motivated and passionate post-doctoral research fellow to work on a funded research project that looks into mixed-mode ventilation in the tropics. The aim of the research is to develop a real-time occupant centric sensing and control strategy that optimizes total building performance for mixed-mode ventilation in the tropics. The research assistant will be supervised by the principal investigator Dr. Adrian Chong from the Department of Building, School of Design and Environment, National University of Singapore.

Job title: Post-doctoral Research Fellow

Qualifications and Skills:

- Ph.D. in Architecture, Engineering, Computer science or related field
- Proficiency (with a demonstrated track record) in building automation and controls
- Proficiency in programming languages Python and/or R
- Good communication skills, and an ability to present research in both academic and non-academic venues.
- Good scientific writing, communication and learning skills

Responsibilities:

- Project management
- Establish a method of measuring and retrieving real-time building operations (building management system data), indoor environmental quality (thermal comfort, air quality, and noise levels) and outdoor ambient conditions.
- Development of a hybrid controls framework that combines machine learning with physics-based models.
- Implement, evaluate and validate hybrid controls framework in an actual testbed.
- Demonstration of proposed framework in an actual building.
- Develop, implement, validate and document models and analysis tools as required.
- Organize, analyze and publish research in peer-reviewed scientific journals.
- Perform other duties as assigned.

4. Monthly basic salary range:

- SGD 5000 ~ SGD 7000 per month

5. Closing date: Open until filled

Interested candidates apply by sending their CV and supporting documents to Adrian Chong (Dr.), Department of Building, National University of Singapore
Email: adrian.chong@nus.edu.sg; Tel: 98210638