

ADRIAN CHONG (Dr)

PhD (Building Performance and Diagnostics) Carnegie Mellon University, MSc (Building Science) NUS, BSc(Project & Facilities Management)(Hons) NUS



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ACADEMIC QUALIFICATIONS:

- BSc (Project & Facilities Management) (Hons, 1st Class) (2010), National University of Singapore, Singapore
- MSc (Building Science) (2012), National University of Singapore, Singapore
- PhD (Building Performance and Diagnostics) (2017), Carnegie Mellon University, USA

EMPLOYMENT RECORDS:

- Research Assistant, Carnegie Mellon University (2012 – 2017)
- Research Intern, Toshiba Research and Development Center, Japan (Dec 2015 – Jan 2016)
- Teaching Assistant, National University of Singapore (2010 – 2017)
- Assistant Professor, National University of Singapore (2017 – present)

ADMINISTRATIVE LEADERSHIP:

- Deputy Programme Director, BSc (Projects and Facilities Management), NUS, Jan 2017 – present
- Coordinator, Practical Training Scheme, NUS, Jun 2017 – Dec 2017.
- Coordinator, Work Experience Internship, NUS, Jun 2017 – Dec 2017.

UNDERGRADUATE TEACHING:

- PF1106 Introduction to Measurement
- PF3201 Measurement (Specialist Works)

GRADUATE TEACHING:

- BPS5112 Green Building Integration and Evaluation Studio

RESEARCH INTERESTS:

- Building performance modeling and simulation
- Building data analytics
- Uncertainty analysis and quantification
- Bayesian calibration

SELECTED PUBLICATIONS:

- Chong, A, K Menberg (2018). Guidelines for the Bayesian calibration of building energy models, *Energy and Buildings*, Vol. 174, pp. 527-547.
- Chong, A, K P Lam, M Pozzi, and J Yang (2017). Bayesian calibration of building energy models with large datasets, *Energy and Buildings*, Vol. 154, pp. 343-355.
- Chong, A, and K P Lam (2017). A comparison of MCMC algorithms for the Bayesian calibration of building energy models. In *Proceedings of the 15th IBPSA Building Simulation Conference*, San Francisco, USA.
- Xu, W, A Chong, K P Lam, and O T Karaguzel (2016). Improving NSGA-II algorithm performance for integer type multi-objective building system design optimization, *Energy and Buildings*, Vol. 127, pp. 714-729
- Chong, A, K P Lam (2015). Uncertainty analysis and parameter estimation of HVAC systems in building energy models. In *Proceedings of the 14th IBPSA Building Simulation Conference*, Hyderabad, India.

PROFESSIONAL/CONSULTING ACTIVITIES:

- Fellow, Global Future Council (GFC) on Cities and Urbanization, World Economic Forum (WEF), 2017 – present
- Treasurer, International Building Performance Simulation Association (IBPSA) - Singapore, 2017 – present.
- Member, Chapter Technology Transfer Committee (CTTC), ASHRAE Singapore Chapter, 2018 – present.

AWARDS:

- NUS Overseas Graduate Scholarship, National University of Singapore, 2012 – 2017
- IBPSA-USA Scholarship for BS2015 in Hyderabad, 2015
- Best innovative workflow for ASHRAE LowDown Showdown modeling challenge, 2015
- Best Proposal (Better Buildings Case Competition), U.S. Department of Energy, 2013
- Most Innovative Proposal (Better Buildings Case Competition), U.S. Department of Energy, 2013
- Lee Kuan Yew Gold Medal, National University of Singapore, 2010
- SISV Gold Medal, National University of Singapore, 2010
- NUS Honorary Award, National University of Singapore, 2009
- NUS President Sports Award – Team, National University of Singapore, 2007