

CV of Assistant Professor Jiyun Song

1. Academic Qualification

- PhD (12/2016), Civil & Environmental Engineering, Arizona State University, USA.
- Master (06/2012), Hydrology & Water Resources Engineering, Wuhan University, China
- Bachelor (06/2010), Hydrology & Water Resources Engineering, Wuhan University, China

2. Positions Held (Chronological Order)

- 08/2019 – present, Assistant Professor, Department of Mechanical Engineering, University of Hong Kong, Hong Kong SAR, China
- 01/2017 – 07/2019, Postdoctoral research associate, Department of Applied Mathematics and Theoretical Physics (DAMTP) & Department of Architecture, University of Cambridge, UK

3. Research Areas Related to Ocean Science, Technology and/or Policy

Climate change adaptation, land-atmosphere interactions, urban hydrometeorology, atmospheric boundary layer dynamics, environmental fluid dynamics.

4. Funded Research Projects as Principal Investigator (PI), Co-PI or Co-Investigator (Co-I) over the Past 5 Years (Maximum 5 Projects):

- Enhancing urban climate resilience and energy efficiency, HKU start-up fund, Principal Investigator (08/2019-present)
- Understanding urban warming of Phoenix through statistical synthesis of long-term climatic and land use land cover datasets, US National Science Foundation (NSF) sub-theme, Principal Investigator (05/2015-12/2016)
- Interfacing an urban land surface model with a single-column atmospheric model, US National Science Foundation (NSF) sub-theme, Principal Investigator (01/2013-12/2013)
- Low Carbon Climate-Responsive Heating and Cooling of Cities, UK Engineering and Physical Sciences Research Council (EPSRC), Main participant (01/2017–07/2019)
- Assessing decadal climate change impacts on urban populations in the Southwestern United States, US National Science Foundation (NSF), Main participant (01/2011–03/2015)

5. Five Key Publications over the Past 5 Years (*Corresponding author)

- [Song J](#), Fan S, Lin W, Mottet L, Woodward H, Davies Wykes M, Arcucci R, Xiao D, Debay J-E, ApSimon H, Aristodemou E, Birch D, Carpentieri M, Fang F, Herzog M, Hunt GR, Jones RL, Pain C, Pavlidis D, Robins AG, Short CA, Linden PF (2018), Natural ventilation in cities: the implications of fluid mechanics. *Build Res. Inf.*, 46(8), 809-828.
- [Song J*](#), Wang Z-H, Wang C (2018). The regional impact of urban heat mitigation strategies on planetary boundary-layer dynamics over a semiarid city. *J. Geophys. Res-Atmos.*, 123(3), 6410-6422.

- [Song J*](#), Wang Z-H, Wang C (2017). Biospheric and anthropogenic contributors to atmospheric CO₂ variability in a residential neighbourhood of Phoenix, Arizona. *J. Geophys. Res.-Atmos.*, 122, 3317-3329.
- [Song J](#), Wang Z-H (2016). Diurnal changes in urban boundary layer environment induced by urban greening. *Environ. Res. Lett.*, 11(11):114018.
- [Song J](#), Wang Z-H (2015). Interfacing the urban land-atmosphere system through coupled urban canopy and atmospheric models. *Boundary-Layer Meteorol.*, 154(3), 427-448.

6. Awards and Recognition

- Chinese Government Award for Outstanding Overseas PhD Students of Year 2016
- Best PhD Dissertation Award of Year 2016 granted by U.S. Chinese-American Oceanic and Atmospheric Association (COAA)