

ALI GHAHRAMANI (Dr)

Postdoc (Center for the Built Environment, UC Berkeley), PhD (Civil Engineering-Informatics for the Intelligent Built Environments) USC, MSc (Computer Science-Data Science) USC, MSc (Industrial and Systems Engineering) USC, MSc (Civil Engineering) USC, BSc (Civil and Environmental Engineering) Shiraz University



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ACADEMIC/PROFESSIONAL QUALIFICATIONS:

- Ph.D. (*Informatics for the Intelligent Built Environments*) (2017), Department of Civil Engineering, University of Southern California
- Master of Science (Data Science) (2013), Department of Computer Science, University of Southern California
- Master of Science (Systems Engineering and Architecting) (2013), Department of Industrial Systems and Engineering, University of Southern California
- Master of Science (Construction Engineering) (2013), Department of Civil Engineering, University of Southern California
- Bachelor of Science (Civil Engineering) (2011), Department of Civil and Environmental, Shiraz University

EMPLOYMENT RECORDS:

- Assistant Professor (President Young Professor), Department of Building, School of Design & Environment, National University of Singapore (NUS) (Jan 2020 – Present)
- Lecturer (Data Science for the Built Environment), UC Berkeley (2017 and 2018)
- Postdoctoral Scholar, Center of the Built Environment, UC Berkeley (2017-2020)
- Graduate Student Researcher, Department of Civil Engineering., University of Southern California (2012-2017)

ADMINISTRATIVE LEADERSHIP:

- None

PROFESSIONAL/CONSULTING ACTIVITIES:

- “An Overview of Artificial Intelligence for Efficient Thermal Comfort Systems” CBE industry conference, Oct 17, 2018, Berkeley, CA

- “Modeling Occupants’ Workplace Interactions via Ambient Sensing” CBE industry conference, April 20, 2018, Berkeley, CA
- “Online and Adaptive Learning and Optimization for Human-Centered HVAC Operations” invited presentation, Civil, Environmental and Architectural Engineering, University of Colorado, Boulder, Feb 14, 2017, Boulder, Colorado
- “Personal Thermal Comfort Learning and Integration into HVAC systems Control Loop”, invited presentation, Center of Built Environment, University of California, Berkeley, September 25, 2015, Berkeley, California
- “Personal Thermal Comfort Learning and Integration into HVAC systems Control Loop”, invited presentation, Building Robotics, September 25, 2015, Oakland, California

TEACHING:

- PF2109 Project Feasibility

RESEARCH INTERESTS:

- Building Energy Efficiency
- Thermal Comfort
- Indoor Environmental Quality
- Smart Buildings
- Sensing Systems for Human Comfort and Health
- Human-Centered Smart Built Environments
- Human-Centered Resiliency and Sustainability

SELECTED PUBLICATIONS (TOP 5):

- Ghahramani, A., Castro, G., Karvigh, S. A., & Becerik-Gerber, B. (2018). “Towards unsupervised learning of thermal comfort using infrared thermography” *Applied Energy*, 211, 41-49.
- Ghahramani, A., Castro, G., Becerik-Gerber, B., & Yu, X. (2016) “Infrared thermography of human face for monitoring thermoregulation performance and estimating personal thermal comfort” *Building and Environment*, 109, 1-11.
- Ghahramani, A., Zhang, K., Dutta, K., Yang, Z., & Becerik-Gerber, B. (2016) “Energy savings from temperature setpoints and deadband: Quantifying the influence of building and system properties on savings” *Applied Energy*, 165, 930-942.
- Ghahramani, A., Tang, C., & Becerik-Gerber, B. (2015) “An online learning approach for quantifying personalized thermal comfort via adaptive stochastic modeling” *Building and Environment*, 92, 86-96.
- Ghahramani, A., Jazizadeh, F., & Becerik-Gerber, B. (2014) “A knowledge-based approach for selecting energy-aware and comfort-driven HVAC temperature set points” *Energy and Buildings*, 85, 536-548.

AWARDS:

- Researcher of the Year (2015-2016) Award in Civil and Environmental Engineering Department Sept 2016
- APSIH Outstanding Achievement in Doctoral Education in Civil and Environmental Engineering May 2016

- MEPC Finalist, Maseeh Entrepreneurship Competition Finalist and Awarded \$2.5 k
March 2016
- Viterbi Graduate Mentorship Program Award for Fall semester of 2015
Dec 2015
- Won the 2nd prize in ESRN (Environmental Sustainability Research Network) poster workshop
May 2014
- Provost's Ph.D. Fellowship, the most prestigious Ph.D. fellowship at University of Southern California
Aug 2013
- Ranked 17th in 16th National Civil Engineering Olympiad for University Students,
July 2011
- First Class Academic Award, Graduated with 2nd highest GPA among more than 50 Students
May 2011