

G.7 >>BDC 3536-7 Sustainable Buildings and Societies Lab
IBUILD Research Fellow U.S. Department of Energy
Office, Sustainable Buildings and Societies Lab
Advisor: Dr. Wangda Zuo

University of Colorado Boulder
IBUILD Research Fellow U.S. Department of Energy
Office, Sustainable Buildings and Societies Lab
Research Assistant Sustainable Buildings and Societies Lab
Teaching Assistant Dept. of Civil, Environmental & Atmospheric Sciences
Advisor: Dr. Wangda Zuo

Boulder Engineering Company
Mechanical & Electrical Engineer
Mechanical Engineer

University of California at Berkeley
Research Assistant Berkeley Energy and Sustainable Buildings Lab
Teaching Assistant Dept. of Mechanical Engineering

(Upcoming) Aug 2024
Feb 2024- Present

Jul 2023 – Present
Jan 2022 – Jul 2023

Aug 2021 –Dec 2021

May 2019– Aug 2021
Aug 2018 –May 2019

Jul 2016 –Jul 2018
Jul 2015 –Jul 2016

Jan 2014 -May 2015
Aug 2013 –Jan 2014

Advisor: Dr. Alice Agogino

**Research
Interests**

Sustainable energy systems (cities, districts, buildings industry), thermo-fluid science, equation based modeling (Modelica), numerical simulation, biomimicry/bio-inspired design, human centered design, life cycle assessment, building controls, design thinking

**Research
Funding**

National Science Foundation (NSF), Computer and Network Systems

EAGER: Collaborative Research: Modernizing Cities via Smart Garden Alleys with Application in Makassar City \$175,000, Award No. CNS-2025459, 07/2016/22, PI Wangda Zuo

q Contributed to full proposal writing and concept development at the equivalent level of a Co-PI

C-10. Ye, Yunyang,

- T-2. "Equation-Based Modeling and Ecosystem Biomimicry of Integrated Building Energy Systems." Research Seminar, Department of Civil, Architectural and Environmental Engineering, Drexel University, May 26, 2023.
- T-3. "BICEPS– Biomimetic Integrated Community Energy and Power Systems." U.S. Department of Energy Building Technologies Office (BTO) Peer Review, Arlington, VA, April 24-28, 2023.
- T-4. "Advancements in Multidomain Modeling and System-Level Biomimicry for the Comprehensive Design of District Energy Systems." Research Seminar, Department of Systems Engineering, Colorado State University, February 2, 2023.
- T-5. "A Fast and Accurate Modeling Approach for Water and Steam Thermodynamics with Practical Applications in District Heating System Simulation." The 2022 Building Performance Analysis Conference and SimBuild, Seminar 5: Open Source Modeling for District Energy Systems, Chicago, IL, September 14, 2022.
- T-6. "Ecosystem-Level Biomimicry for the Built Environment: Adopting Systems Ecology Principles for the Control of Heterogeneous Energy Systems." The 5th International Conference on Building Energy and Environment, Montreal, Canada, July 28, 2022.
- T-7. "Virtual Testbed for Optimized Planning of Smart, Sustainable, and Connected Communities." The 2022 IEEE Power & Energy Society General Meeting, Denver, CO, July 19, 2022.
- T-8. "From Furnaces to Forests: Innovations in Modeling and Simulation for the Transition of Legacy District Energy Systems to Integrated Biomimetic Design." Research Seminar, Department of Mechanical Engineering & Mechanics, Drexel University, Virtual, December 20, 2021.
- T-9. "A Case Study on Condenser Water Supply Temperature Optimization with a District Cooling Plant." The 14th International Modelica Conference, Virtual, September 23, 2021.
- T-10. "Modeling and Simulation of District Cooling Systems with Modelica." IBPSA Denver Chapter: Student Presentation, Virtual, May 20, 2021.
- T-11. "A Modeling Framework to Evaluate Energy, Transportation, and Communication Interdependence in Smart and Connected Communities." The American Modelica Conference Virtual, September 22, 2020.

Teaching Assistant, University of Colorado Boulder
AREN 4317:Architectural Engineering Design
AREN 3540:illumination I

Graduate Student Instructor, University of California, Berkeley
ME 110: Introductiorto New Product Developmentg

Dean's List (8 quarters), DU	2010-2013
A University of Denver Scholar-Athlete of the Year (4 years)	2009-2013
NSCAA Scholar All-West Region Team	2012
Second Team All-WAC Selection	2012
Academic All-American First Team, Division I Women's Soccer	2011
Preseason All-Sun Belt Conference Team	2011
Sun Belt Conference Commissioner's List (all 3 seasons)	2009-2011
SBC All-Conference First Team	2019
DU Invitational All-Tournament Team	2009
CS360's Primetime Performers of the Week (9/15)	2009