LIU LIU

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SKILLS

- Building modeling and energy simulation with eQuest, EnergyPlus, OpenStudio, and IES VE
- HVAC system design and optimization based on ASHRAE 90.1 and ASHRAE 62.1
- Solid knowledge of the Building Energy Code based on ASHRAE 90.1, NYC Local Laws (LL86, LL97, LL31, LL32, etc), and California Title 24
- Decarbonization Strategies, renewable, batteris and Solar PV study
- Building energy model calibration, measurement and verification
- Autodesk Auto CAD, Rhino, Microsoft Office, Adobe, and Bluebeam
- Event planning and project management

CERTIFICATION

- Fundamentals of Engineering (EIT) and preparing for PE
- ASHRAE BEMP

PROFESSIONAL WORK EXPERIENCE

Atelier Ten, New York City, NY
Associate, Jun 2023-Present

- Lead the Training and Standardization Team
- Project management and budgeting
- Perform and review the whole building energy analysis and ensure the quality of the work
- Perform complex building energy modeling and provide plant or campus-level master planning decarbonization and operational energy reduction strategies
- Perform building energy code analysis for a variety of projects in different states as part of the building permit process such as NYC, NYS, California, Washington DC, Toronto Green and others
- Review and quality control of the LEED and other international building benchmarking systems such as the Chinese Green Building Standard (GB-55015-2021). Archived a number of projects LEED Platinum and Gold and usually receive 0 to 3 EAc2 comments.
- Assist and support the Energy Model Practice Leader to manage the team and develop training materials

Senior Environmental Designer, Sep 2021-Jun 2023

- Lead and trained the San Francisco office's energy modeling team
- Perform and review the whole building energy analysis and ensure the quality of the work
- Provide decarbonization strategies and impacts to the stakeholders
- Work closely with the engineering team to help optimize the design in terms of equipment sizing, system selection, and Life-Cycle Cost Analysis
- Perform building energy code analysis for a variety of projects in different states as part of the building permit process such as NYC, NYS, California, Washington DC, Toronto Green and others
- Review and quality control of the LEED and other international building benchmarking systems such as the Chinese Green Building Standard (GB-55015-2021). Archived a number of projects LEED Platinum and Gold and usually receive 0 to 3 EAc2 comments.

- Perform complex building energy modeling and provide plant or campus-level master planning decarbonization and operational energy reduction strategies
- Worked on multiple AIA reward and or landmark building projects
- Assist and support the Energy Model Practice Leader to manage the team and develop training materials

Environmental Designer, Oct 2018-Sep 2021
- Model and analyze building system operation including mechanical, lighting, electrical, and plumbing systems
- Perform whole building energy analysis with analytical software such as eQUEST, OpenStudio, EnergyPlus, IES, and CBECC-Com
- Initiate HVAC system load sizing and ventilation calculation
- Work closely with the engineering team to help optimize the design in terms of equipment sizing and system selection
- Perform building energy code analysis for a variety of projects in different states
- Perform LEED and other building benchmarking systems documentation using internally developed and rating authority authorized tools
- Project management including billing, project scheduling, client meeting, and presentation

Design Staff, Feb 2017-Sep 2018
- Model and analyze basic building systems
- Perform whole building energy analysis with analytical software such as eQUEST, OpenStudio, EnergyPlus, IES, and CBECC-Com
- Support project manager with a variety of assigned tasks
- Perform building energy code analysis for a variety of projects in different states as part of the building permit process
- Perform LEED credit documentation

EDUCATION

The University of Alabama, Tuscaloosa, AL
M.S., Mechanical Engineering (December 2016)
Concentration: Energy Simulation, Modeling, and Management
Proposed topic: Energy Modeling and Calibration of a Mixed-use Building with Laboratories, Offices and Classrooms
GPA:4.0/4.0
The University of Alabama, Tuscaloosa, AL
B.S., major, Mechanical Engineering, minor, Mathematics (May 2013)
Minor: Math
GPA:3.9/4.0

MEMBERSHIP

- ASHRAE
- IBPSA