Ehsan Rostami

✉ ehsan.rostami@outlook.com   🌐 ehsan-rostami.github.io   🔗 linkedin.com/in/ehsanrostami9

EDUCATION

Master of Science in Architecture and Energy   *2019-2022*
University of Ilam   Ilam, Iran
- **Thesis:** *The effects of heterogeneity in the layout and density of urban blocks on the daylight availability and energy efficiency of buildings*
- **GPA:** 18.69/20 (3.92/4)
- **Advisor:** Professor Nazanin Nasrollahi

Bachelor of Science in Architecture Engineering   *2012-2016*
University of Ilam   Ilam, Iran
- **GPA:** 16.94/20 (3.62/4)

PUBLICATIONS

- Rostami, E., & Nasrollahi, N. (2025). *The impact of urban morphology on sunlight availability at urban and neighborhood scales: A systematic review*. Sustainable Cities and Society, 121, 106194. **https://doi.org/10.1016/j.scs.2025.106194**
- Rostami, E., Nasrollahi, N., & Khodakarami, J. (2024). *A comprehensive study of how urban morphological parameters impact the solar potential, energy consumption, and daylight autonomy in canyons and buildings*. Energy and Buildings, 305, 113904. **https://doi.org/10.1016/j.enbuild.2024.113904**
- Nasrollahi, N., & Rostami, E. (2023). *The impacts of urban canyons' morphology on daylight availability and energy consumption of buildings in a hot-summer Mediterranean climate*. Solar Energy, 266, 112181. **https://doi.org/10.1016/j.solener.2023.112181**

RESEARCH PROJECTS

- **EPW Insights - Interactive Climate Data Analysis Platform (2024-2025)**
  A comprehensive web application for analyzing EnergyPlus Weather files through interactive visualizations, enabling climate data exploration for building performance analysis (Project Link: https://ehsan-rostami.github.io/epw-insights).
- **Grasshopper Urban Morphology Toolkit (2021-2022)**
  Developed in collaboration with Professor Nazanin Nasrollahi at University of Ilam: Custom Grasshopper algorithms automating urban morphology parameter extraction and analysis, leading to findings published in Energy and Buildings journal.
- **Mobile Measurement Method for Urban Microclimate Analysis (2021)**
  Developed under supervision of Professor Nazanin Nasrollahi at University of Ilam for master's thesis: A mobile measurement methodology using calibrated portable sensors to collect comprehensive microclimate data, revealing correlations between urban morphology, solar potential, and thermal comfort in Ilam, Iran.
- **3D Urban Modeling without GIS Data (2021)**
  Created as part of master's thesis research at University of Ilam: A high-fidelity 3D model of approximately 2,500 buildings in Ilam's urban core enabling detailed solar potential and energy consumption simulations in areas lacking GIS resources

ACADEMIC CONTRIBUTIONS

Peer Reviewer

- Conducted peer reviews for high-impact journals, including *Energy and Buildings*, *Building and Environment*, *Frontiers of Architectural Research*, and *Journal of Housing and the Built Environment*, contributing to advancing energy and architectural research.   *2023-2025*

HONORS & AWARDS

Best Graduate Student Issued by University of Ilam (Nov 2022)

RELATED COURSES

Graduate

- o Energy and Architectural Design
- o Energy and Urban Design
- o Passive and Active Systems
- o Measurement Systems and Optimizing of Existing Buildings
- o Heat Transfer
- o Energy Analysis
- o Energy Management

Undergraduate

- o Architectural Design
- o Urban Space Planning
- o Urban Space Design
- o Rural Research & Design
- o Construction Project Management
- o Reinforced Concrete Building Design
- o Building Construction
- o Surveying
- o Environmental Control of Building
- o Building Technical Design
- o Building Mechanical Services
- o Strength of Materials and Steel Structures

Online Courses

- o Nature-based Solutions for Disaster and Climate Resilience (Apr 2025)
- o Sustainable Cities (Jun 2023)
- o Solar Energy for Engineers, Architects, and Code Inspectors (May 2022)
- o Global Energy and Climate Policy (Dec 2021)
- o BIM Application for Engineers (Nov 2021)
- o Design Computing: 3D Modeling in Rhinoceros with Python/Rhinoscript (Oct 2021)
- o Renewable Energy and Green Building Entrepreneurship (Oct 2021)

SKILLS

Programming and Web Development Skills

- o Python, R, PHP, JavaScript (ES6+), D3.js, HTML5, CSS3, Bootstrap

Building and Urban Performance Simulation/Analysis

- o EnergyPlus, Ladybug Tools, Pollination, OpenStudio, ClimateStudio, UMI, DIALux, Optimization Algorithms (Genetic & Multi-objective), DesignBuilder, Envi-Met, RayMan

2D/3D Modelling and BIM

- o Rhinoceros 3D, Grasshopper 3D, Revit Architecture, Autodesk Navisworks, 3Ds Max/VRAY, Lumion, SketchUp, AutoCAD

Non-Engineering Software Skills

- o IBM SPSS Statistics, Adobe Photoshop, Microsoft Project, LaTeX, EndNote

Language

- o Kurdish: Mother tongue

- o Persian: Native

- o English: Proficient

REFERENCES

- o Available upon request.