## Hoda Homayouni, Ph.D. LEED

#### **Education**

• **Doctor of Philosophy** in Built Environment University of Washington, Seattle, Washington. Area of Study: Computational Design and Research.

Winter 2008- Spring 2015 (GPA: 3.77/4)

• Master of Science in Architecture

University of Washington, Seattle, Washington.

Area of study: Design Computing. Fall 2005 - Fall 2007 (GPA:3.81/4)

 Bachelor of Science in Architecture University of Tehran, Tehran, Iran.
 Fall 1999- Summer 2004 (GPA:17/20)

### Fields of Interest

Green Building Design and Construction, Sustainable Architecture, Regenerative Design & Development, Building Information Modeling, Integrative Design Process, Building Energy Performance Analysis, Project Management.

# Teaching Experience

- Teaching Associate for "Advanced Design & Construction Management Techniques", Iran University of Science & Technology, Second Semester 1397.
- Teaching Associate for "Sustainable Architecture studio II", Iran University of Science and Technology, First Semester 1397.
- Teaching Associate for "Theories and Processes in Sustainable Design", Iran University of Science and Technology, Second Semester 1396- present.
- Teaching Assistant for "Building Information Modeling Certificate", Center for Education and Research in Construction, University of Washington & Skanska, fall 2015, Winter 2016, and Fall 2016.
- Teaching Associate for curriculum planning of a new college-wide course in Built Environment program called "**Digital Adventure**", University of Washington, College of Built Environment, Spring 2015.
- Teaching Associate for CM 515- "Innovative Project Management Concepts", University of Washington, Department of Construction Management, Winter 2015.
- Teaching Associate for CM 414- "Virtual Construction", University of Washington, Department of Construction Management, Fall 2014.
- Teaching Assistant for CM313- "Construction Methods and Materials", University of Washington, Department of Construction Management, Fall 2009.
- Teaching Assistant for CM515- "Advanced Project Management Concepts", University of Washington, Department of Construction Management, Spring 2009.
- Teaching Assistant for Arch 478 "Auto-CAD and Working Drawings", University of Washington, Department of Architecture, Fall 2006 and Fall 2007.
- Teaching Assistant for Arch 150 "**Appreciation of Architecture I**", University of Washington, Department of Architecture, Spring 2007 and Fall 2007.
- Teaching Assistant for Arch 151 "**Appreciation of Architecture II**", University of Washington, Department of Architecture, Winter 2007.

• Teaching Assistant for Arch 482 – "**Web-weaving**", University of Washington, Department of Architecture, Fall 2006.

## **Computer Skills**

- **Architectural Drafting & Modeling Tools**: Proficient in Revit Architecture 2018, AutoCAD, Form.Z radiosity, and SketchUp.
- Energy Simulation/Lighting & Ventilation Analysis tools: Proficient in Design Builder, Insight (Revit Energy plugin tool), AGI32, Familiar with Autodesk Flow Design.
- **Parametric Modeling**: Familiar with Dynamo.
- **Construction Management Software packages**: Proficient in Navisworks 2018, and BIM 360 Glue. Familiar with BIM 360 Field, and Prolog.
- **Web Developing**: Familiar with CSS, Javascript, HTML, PHP, MySQL, Database Integration.
- **Programming Languages**: Proficient in Matlab, familiar with Java developer.
- **Presentations**: Proficient in Microsoft Office 2016, Adobe Premier and Adobe Photoshop.
- **Rapid Prototyping Methods**: Hands on experience with Laser cutter, 3D printer, and CNC machines.

#### **Publications**

### **Journal Papers:**

Dossick, C. S., Homayouni, H., Lee G. (2015). "Learning in Global Teams: BIM Planning and Coordination." International Journal of Automation and Smart Technology 5(3), 119-135.

### **Conference Papers:**

- Monson C., Homayouni H., Dossick C., Anderson A. (2015). "Improving the Understanding of BIM Concepts Through a Flipped Learning Lab Environment: A Work in Progress." 122<sup>nd</sup> ASEE Annual Conference & Exposition.
- Dossick, C. S. Anderson A., Homayouni H., Monson, C. (2015). "Exploring Flip for BIM: Tutorials at Home, Exercises in Lab." 9<sup>th</sup> BIM Academic Symposium & Job Task Analysis Review, Washington DC, 64-71.
- Homayouni, H., Dossick, C. S., & Neff, G. (2014) Achieving Higher Energy Efficiency in High-Performance Buildings Using Integrated Practices: A Fuzzy Set-Qualitative Comparative Analysis Approach. Construction Research Congress (pp. 454-463). ASCE.
- Homayouni, H., Dossick, C. S., Neff, G., (2011). "Construction Projects as Fuzzy-Sets: A Set Theoretic Approach to Analyzing the Role of Building Information Modeling in Higher Performance Buildings." Proceeding Editor
- Homayouni, H., Neff, G., Dossick, C.S. (2010). "Theoretical Categories of Successful Collaboration and BIM Implementation within the AEC Industry", Construction Research Congress, Seattle.
- Dossick, C. S., Neff, G., and Homayouni, H. (2009). "The Realities of Building Information Modeling for Collaboration in the AEC Industry." Construction Research Congress, Seattle.

### **Dissertations:**

- Homayouni, H. (2015). "Aligning Contractual Organizational and Technological Elements to Achieve Higher Performance Buildings." University of Washington.
- Homayouni, H. (2007). "A Genetic Algorithm Approach to Space Layout Planning Optimizaiton." University of Washington.

	Homayouni, H. (2004). "The Nature Hotel." University of Tehran.  White Papers: Homayouni, H. (2006). "A survey of computational approaches to space layout planning (1965-2000)". University of Washington.
Research Positions	Research Assistant in National Science Foundation (NSF) funded project analyzing ethnographic studies on communication and collaboration behavior, and use of new technologies in architecture projects (2009-2011).
Workshops/ Seminars	Green Building Assessment Systems- 4 hour workshop- IUST University- November 2017 LEED V4 Building Design & Construction- 8 hour Seminar- IUST University- December 2017
Certificates	LEED Green Associate Certificate, June 2017. Independent Autodesk Building Performance Analysis Certificate, January 2017.
Professional Experiences	Sustainability team lead for Water & Sewerage Company Head Quarter Project, Amir Kabir University of Technology Sustainability Office (August 2019- Present).
Volunteer Experiences	<ul> <li>Volunteer Designer at "Architects Without Border" in Seattle, WA. Designing a boarding school in Kenya. March 2016- present.</li> <li>Volunteer Teacher at community weekend programs for children and youth in IMAN organization, Kirkland, WA. Fall 2007- Spring 2009, Fall 2015-present.</li> <li>Volunteer Teacher for "Mathematical Olympiad Prep", Refah middle school, Tehran, Iran, 1999-2000 academic year.</li> </ul>
Language Proficiency	Persian (native), English (fluent), and Arabic (good reading and writing skills, fair listening and speaking abilities).
Awards and Honors	<ul> <li>The best paper award at the 2015 American Society of Engineering Education (ASEE) Annual Conference in the Architectural Engineering Division.</li> <li>Engineering Project Organization Society (EPOS) Ph.D. Scholar 2011.</li> <li>Fellowship recipient from university of Washington for Fall2008-Spring 2009.</li> <li>Selected for the second round of Iranian National Olympiad in Informatics, 1998.</li> <li>Selected for the second round of Iranian National Physics Olympiad, 1998.</li> <li>Selected for the second round of Iranian National Mathematics Olympiad, 1997 and 1998.</li> </ul>
Hobbies	Racquetball (USA Racquetball member), Wallyball, Swimming, Ice-skating, Poetry and Traveling.