RASHMI BALIGA

Graduate Student, Building Performance and Diagnostics

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EDUCATION

Master of Science in Building Performance and Diagnostics

Carnegie Mellon University

📅 August 2018 – Present | 📍 Pittsburgh, PA

CGPA: 3.97/4.33

Bachelor of Architecture

Sir J. J. College of Architecture

📅 July 2013 – June 2018 | 📍 Mumbai, India

CGPA: 8.21/10

SKILLS AND ABILITIES

- Building Energy Performance Modeling
- Energy Consumption Analysis
- Post Occupancy Evaluation
- Familiar with LEED and WELL rating systems
- Familiar with ASHRAE building standards and benchmarking methods
- Knowledge of power distribution infrastructure

SOFTWARES

eQuest
DesignBuilder + EnergyPlus
Rhino + Grasshopper
Revit + CEA tool
Climate Consultant
AutoCAD
SketchUp
Photoshop

PROGRAMMING

| C++ | Python | Basic MATLAB |

WORD-PROCESSING

| MS Office Suite | LaTeX |

EXTRA - CURRICULARS

K.C. Mahindra Merit Scholar   📅 2018

Volunteered at GreenBuild Expo, India

- First GreenBuild Expo in India, organized by the USGBC.   📅 2017

Student Council, Sir. J. J. College of Architecture (Cultural Team)

Cultural Secretary   📅 2015 - 2016
Cultural Undersecretary   📅 2014 - 2015

- Planned and implemented the annual cultural festival of the college.

RELEVANT COURSEWORK AND PROJECTS

Graduate Coursework

Fall 2018 - Coursework and Projects

- **Building Performance Modeling** - Analyzed a commercial building's energy performance using Revit CEA, eQuest and DesignBuilder + EnergyPlus. Modeled and analyzed HVAC systems on DesignBuilder using EnergyPlus
- **Productivity, Health and Quality of Buildings** - Quantified the potential economic benefit of user-oriented building portfolio investments
- **LEED, Green Design and Building Rating in a Global Context** - Researched credit requirements for global rating systems like LEED, Green Mark, GBI etc.
- **Mechanical and Electrical System Design for Buildings** - Conducted a building audit of Posner Hall and studied the building engineering systems, power distribution and construction methodology and materials

Spring 2019 - Ongoing

- **Environmental Performance Simulation** - Evaluating the environmental performance (solar, visible and thermal radiation) of a structure using Grasshopper plugins for Rhino (Ladybug, DIVA, ArchSim).
- **Building Controls and Diagnostics** - Analyzing and designing building control systems using empirical and field-based methods at the Centre for Sustainable Landscapes (CSL) building, Pittsburgh, PA.
- **Zero Energy Housing** - Learning and applying Zero Energy and Carbon Balance definitions, calculations and design methods, and using RESNET for the HERS rating system.
- **BIM for Engineering, Construction and Facility Management**

Undergraduate Dissertation - Architecture for Outreach

- Devised a method to increase accessible medical aid in rural India by the means of portable, deployable architectural modules using existing transportation infrastructure.

EXPERIENCE

Graduate Research Assistant

Carnegie Mellon University   📅 Sept 2018 – Dec 2018   📍 Pittsburgh

Guide: Prof. Omer Tugrul Karaguzel

- Research area: Post Occupancy Evaluation + Measurement
- Conducted research and analysis of post occupancy evaluation methods
- Analyzed and updated Carnegie Mellon University's *National Environment Assessment Toolkit* protocol, and checked calibration of sensors and equipment

Architectural Intern

Moco Design Studio   📅 Dec 2016 – May 2017   📍 Pune, India

- Created and issued design, construction and compliance documentation for commercial and residential buildings.

WORKSHOPS

Earthquake Resistant Building Workshop

Indian Institute of Technology, Kanpur   📅 2016

Zero Energy Building Workshop

Indian Institute of Technology, Bombay   📅 2015