Maaz Dixit

237, Manekbaug Society, Ambawadi, Ahmedabad 380015, India
✆: +91 9662010711 ✉: maaz.dixit@gmail.com

Education

CEPT University **Ahmedabad, India**
M.Tech. in Building Energy Performance, (Sem IV: 4/4) *2015–2018*
(Passive Design Lab, HVAC Lab, Lighting, Daylighting and Integrated Design Lab)

Sardar Vallabhbhai Institute of Technology **Vasad, India**
B.Arch. in Building Construction Technology, 6.7/10 *2009–2014*
(Design studios, Construction Technology, Structures, History of Architecture)

MITx, edX
4.065x: A Global History of Architecture *2013*

Experience

Learn-BPE (Building Performance Evaluation), Research Assistant **Gujarat, India**
CEPT University, Ahmedabad *April 2017 – April 2018*
Part of performance evaluation of a LEED and GRIHA accredited institutional campus. Part of ground work of monitoring building which includes instantaneous measurements, logging over time, surveys and interviews. This research aims to identify and understand the gaps in the intended performance and the actual performance of the building. Carried out initial extensive literature review as part of the project to understand the relevance and impact for Indian context.

Buildings Energy and Environment, Teaching Assistantship **Gujarat, India**
CEPT University, Ahmedabad *August 2017 – November 2017*
The course of Buildings, Energy and Environment Seminar Course dealt with an introduction to building energy use, strategies for reducing use, and integrating renewable energy in the building stock. This was a seminar course where I was part of developing class presentation and forming assignments. This included frequent and in-depth weekly discussion with a group of 15 students.

Centre for Advance Research in Building Science and Energy, Intern **Gujarat, India**
CEPT University, Ahmedabad *March 2017 - June 2017*
Part of simulation based study for Low Energy Cooling system (LEC) analysis through Design Builder and Energy plus tool this included understanding impact of LEC systems on energy and thermal comfort. Developed prototype models for commercial building types to understand the impact and future scope for Energy Conservation Building Code (ECBC). Extensive literature review for IEA Personalized Control Systems (PCS) project to understand how can personalized control systems help in energy reduction at a building level.

HVAC Lab, Teaching Assistantship **Gujarat, India**
CEPT University, Ahmedabad *March 2017 – May 2017*
The course of Heating Ventilation and Air Conditioning (HVAC) Lab Course included understanding system and its components and implementing in simulation software. This was a lab course where I was part of developing class presentation, teaching simulation software and forming assignments. This experience also included frequent and in-depth weekly discussion with a group of 10 students.

Centre for Sustainable Building Research, BHAVAN Intern **Minneapolis, USA**
University of Minnesota, Minneapolis *August 2016-February 2017*
The focus of my study here was to develop benchmark models for energy consumption for various building types and function for Indian context. Various parametric combinations viz., shading depths, orientation, wall assembly, daylighting and window to wall ratio were modeled and simulated. This research included modelling and designing framework for simulation runs where three approaches will be dealt with, viz., whole building simulation, assets and operation and lastly the system benchmarking. The outcome of this research was an excel based simple tool which will be easy to use for an Architect/ Owner in the pre-design or even the programming phase where they can estimate the EPI through minimal inputs.

Centre for Advance Research in Building Science and Energy, Intern **Gujarat, India**
CEPT University, Ahmedabad *May 2016 - July 2016*
Part of two projects: integrating Phase Change Materials (PCM) in building façade and understanding its impact on naturally ventilated and air-conditioned building. This included developing simulation models in energy plus with proper understanding of PCM properties as an input and further analyses of results. Second project included developing an interactive excel tool which helped linking user input for window and shading size to IDF files for non-coolant shading devices which was further used for background calculation for an online Solar Heat Gain Coefficient (SHGC) tool.

Aakirna Architects, Assistant Architect **Gujarat, India**
Ahmedabad *May 2014 - July 2015*
Part of residential and commercial projects from their conceptualization to realization. Worked on the interior and architectural projects giving creative inputs. Involved in client meetings, working drawing development, site visit and coordination with various consultants.

Kalol Institute of Architecture and Design, Lecturer **Gujarat, India**
Kalol *January 2015 - January 2016*
Visiting faculty for the subjects of Structural and Construction systems in architectural practice. Sole instructor and evaluator for the said course for four semesters. Conducted Lectures for 120 freshmen and sophomore students.

Prashant Pradhan Architects, Intern **Sikkim, India**
Gangtok *January 2014- April 2014*
Key work responsibilities included design and drafting of projects undertaken by the firm. Exposed to various stages of design and implementation of architectural projects.

Freelance Work:

Neev Energy Consultants, Energy consultant
- Technical advisor for International Space Research Centre (ISRO), Ahmedabad, August 2018.
- Consultancy for Kamakshi Flex prints, Ahmedabad, August 2018
  Indoor environmental quality, daylighting and lighting optimization for industry building at Bavla, Ahmedabad.
- Consultancy for Aarya Architects, Ahmedabad, July 2018
  Daylighting and lighting optimization for Library building at IIHS, Banglore.
- Consultancy for Conserve consultants, Chennai, May 2018
  Developed baseline models for energy compliance in eQuest.
- Consultancy for Almak Project Management and Audit consultants, Vadodara, June 2018
  Consultation for energy efficiency on government tenders and projects.

Neev Architects, Principal Architect

- Consultancy for Pidilite Industries Limited, Ahmedabad, India, September 2015
  Developed working drawing plans for renovation of Pidilite, Ahmedabad office.
- Interior Design for Jhanvi Fracture Hospital, Maninagar, Ahmedabad, April 2015
  Interior design for hospital with 20 bed facility. Project included frequent site visits and coordination with relevant stakeholders.
- Faucet design for Jaguar, Delhi, India, July 2013
  Schematic models and sketches for faucet design and independent design project funded by Jaquar Delhi. Project included presentation at Delhi headquarters to the Board of Directors and designers.

Participation

- Attended 10th International Built Environment Research Conference, Sri Lanka, December 2017
- Attended 12th ISHRAE confluence and REFCON, Ahmedabad, September 2017
- Delegate at the ACREX, February 2016
- Delegate at the Young Leader's Dialogue Conference, Singapore, September 2015
- Chief Co-ordinator for Zestopus, College Festival, SVIT Vasad, January 2013
- Participated in the zonal meeting of 'National Association of Schools of Architecture', IPSA Indore, September 2011

Achievement and Memberships

- IGBC Accredited Professional, 01st September 2018 (100/110)
- LEED Green Associate, 31st July 2018 (186/200)
- Building Energy Efficiency Higher & Advance Network (BHAVAN) Internship, USA, 2016-2017
- Student Treasurer and Secretary, ASHRAE, Ahmedabad Student Chapter, 2015-2016
- License Number CA/2015/66678, Council of Architecture, India

Skills

Language skills:
English: Full professional proficiency

Computer Skills:
Architectural (3D/2D) Software**:** *Autocad, Sketchup, Vray for Sketchup, Lumion*
Energy Simulation Software: *Design Builder, IES VE, Energy Plus, eQuest*
Data and Image Processing Software: *Photoshop, Indesign, MS Office, Python*

Lab hands on experience:
Capable of handling weather station, air-flow measurements instrument, data loggers for ambient conditions, CO_2 loggers, particle data counter, thermography filming, illuminance and luminance measurements.

Publication

Jain, A. Mundhe, P., Sunger, P., Bist, N. **Dixit,M**. (2017). Prototype of Net Zero Residence for Hot & Dry Climate in Indian Context. In Proceedings of *10th International Conference of Faculty of Architecture Research Unit (FARU), University of Moratuwa, Sri Lanka.*