917.325.7476 linkedin/rahi-shah

EDUCATION

Columbia University, New York, NY

Master of Science, Mechanical Engineering, Feb 2017

${\bf Pandit\ Deendayal\ Petroleum\ University},\ {\bf Gujarat},\ {\bf India}$

Bachelor of Technology, Mechanical Engineering, June 2015

EXPERIENCE

Project Manager - Core & Shell

Henick-Lane Inc. New York, NY

Responsibilities include but are not limited to project planning, cost monitoring, vendor management, stake holder engagement, workforce scheduling and value engineering of high-rise HVAC projects. Successfully led a departmental migration to new platforms for better management and decrease of project turn around time by up-to 20 percent.

Research Assistant -Swamy Lab

Columbia University

Aug '15 - Aug '16

Apr '17 - Present

New York, NY

Ex-doctoral candidate, my responsibilities included management of lab resources and conducting academic research. Also served as TA for undergraduate courses of Heat Transfer and Thermodynamics.

Summer Engineering Intern

L&T Power

May '14 - July '14

Baroda, India

Intern at the central planning and monitoring division of an ongoing supercritical thermal power project. Created work break-down structures, earliness/tardiness reports and scheduling for the de-mineralization (DM) plant for an active project.

Summer Engineering Intern

Membrane System Specialists

May '13 - July '13

Mumbai, India

Engaged in comprehensive study, design and maintenance of fully and semi automatic DM and reverse osmosis water treatment plants. Participated in project engineering of two semi-automatic DM plants for the automobile industry.

PROJECTS

430 East 58th Street: 800+ ft Residential High Rise

24-02 49th Avenue: 500,000 SF Commercial Core & Shell

Overall lead for capital, people and project: 40+ member team with capital ranging from \$ 9-20M. In charge of value engineering, construction, execution, quality control, and commissioning.

Skills required: HVAC, BAS, Project Management, Cost Control, Scheduling etc.

Study of Fluid Interfaces Near Critical Point: Conducted theoretical research work on Lifshitz theory of van der Waals pressure in dissipative media for study of non polar fluid interfaces near critical point.

Skills required: Python, mathematical modeling, data analysis and validation.

Selective Emission Properties of PDMS thin-films for Passive Cooling: Attempt to exploit the selective emission properties of Polydimethylsiloxane for night-time passive cooling applications of sheet metal rooftops. Created optimization and heat transfer models with validation against experimental data.

Skills required: thermal design, modeling, FTIR spectroscopy, spin coating, data acquisition and analysis.

Experimental Investigation of Organic Rankine Cycle Utilizing Scroll Expander: Successfully designed and executed a test rig for experimental investigation of Organic Rankine Cycle using scroll expander. The 1.8 kW capacity plant uses a

modified automotive scroll compressor replacing the conventional turbine. Published in Springer Proceedings in Energy 2019.

Skills required: thermo-fluid design and modeling, fabrication and prototyping.

COMPUTER SKILLS

Languages: C++, Python, R, Wolfram, SQL, LATEX.

Applications: Solidworks, Creo, AutoCAD, ANSYS (Fluent, Icepak & Mechanical),

MATLAB, Revit, Primavera, Tableau.

AWARDS 2015 1st position ACREX Quiz by ISHRAE at respective university

and chapter levels. Stood among national Top 20 2014 2nd position Adhyayan Paper presentation competition, PDPU 2014 Scholarship Undergraduate research grant awarded by Office of

Research and Sponsored Programs, PDPU

CERTIFICATION Project Management Professional (PMP), Project Management Institute LEED Green Associate, U.S. Green Building Council