Rahi Shah

https://www.linkedin.com/in/rahi-shah rahi.shah@columbia.edu | 917.325.7476

EDUCATION

Columbia University

MS IN MECHANICAL ENG. Expected Dec 2016 | New York, NY Cum. GPA: 3.54 Conc. in Energy Systems

Pandit Deendayal Petroleum University (PDPU)

B.Tech IN Mechanical Eng. Grad. May 2015 | Gujarat, India Cum. GPA: 3.75 / 4.0

CERTIFICATION

LEED Green Associate

COURSEWORK

Graduate

Advance Heat Transfer Computational Fluid Dynamics Energy Dynamics of Green Buildings Micro Electro- Mechanical Systems

Undergraduate

Heat and Mass Transfer Refrigeration and Air Conditioning Non Conventional Energy Sources Combustion, Fuels and Pollution

SKILLS

Programming

Python • Mathematica • MATLAB • EES
• LATEX • R • Processing • C++

Software

PTC Creo • SolidWorks • ANSYS (Fluent)

- OpenFoam Open Modelica ArcGIS
- Cycle Tempo LabVIEW COMSOL
- Primavera Master builder

RESEARCH

SWAMY GROUP | GRADUATE RESEARCH ASSISTANT

Aug 2015 - Present | New York, NY

Theoretical Lifshitz theory of van der Waals pressure in dissipative media for study of fluid interfaces near critical point. Mathematical modeling, data analysis and validation.

Experimental work on selective radiative emission and passive cooling properties of thin-films such as PDMS (Polydimethylsiloxane).

ORSP, PDPU | UNDERGRADUATE RESEARCHER AND TEAM LEADER

Jan 2014 - Aug 2015 | Raisan, India

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 at net 8% thermal efficiency. Under the guidance of **Prof Surendra Kachhwaha** and Office of Research and Student Programs (ORSP). Publication under progress.

EXPERIENCE

HENICK-LANE INC. | PROJECT ENGINEERING INTERN

Sept 2016 - Dec 2016 | New York, NY

• Responsible for Estimating, Scheduling and Value Engineering of high-rise as well as residential HVAC projects.

L&T POWER | Summer Engineering Intern

May 2014 - July 2014 | Baroda, India

- Worked in central planning and monitoring division of an ongoing supercritical thermal power project.
- Created work break-down structure and earliness/tardiness scheduling for Demineralization plant for a running project.

MEMBRANE SYSTEM SPECIALISTS | SUMMER ENGINEERING INTERN May 2013 - July 2013 | Mumbai, India

 Engaged in comprehensive study, design and maintenance of fully and semi automatic Demineralization and Reverse osmosis water treatment plants.
 Actively took part in major repair project of two automatic DM plants in automobile industry.

AWARDS

| 2015 | National | Top 20 in ACREX Quiz by ISHRAE. 1^{st} position at re- |
|------|--------------------------|--|
| | | spective university and chapter level |
| 2014 | 2 nd position | Adhyayan - Paper presentation competition, PDPU |
| 2014 | Scholarship | Undergraduate research grant awarded by Office of |
| | | Research and Sponsored Programs, PDPU |

MISCELLANEOUS

- Avid student of music and former guitar tutor: blues, jazz and Indian classical.
- 500+ hours of volunteer work engaging with economically backward and differently abled individuals