

Rahi Shah

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EDUCATION

Columbia University

MS IN MECHANICAL ENG.
Grad. Jan 2017 | New York, NY
Conc. in Energy Systems

Pandit Deendayal Petroleum University

B.TECH IN MECHANICAL ENG.
Grad. May 2015 | Gujarat, India

CERTIFICATION

LEED Green Associate

COURSEWORK

Graduate

Advanced Heat Transfer
Computational Fluid Dynamics
Energy Dynamics of Green Buildings
Micro Electro- Mechanical Systems
Global Energy Policy

Undergraduate

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

SKILLS

Programming

Python • Mathematica • MATLAB • EES
• L^AT_EX • R • Processing • C++

Software

PTC Creo • SolidWorks • ANSYS (Fluent
& Icepak) • 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). Thermal design, modeling, data acquisition and analysis.

ORSP, PDPU | UNDERGRADUATE RESEARCHER AND TEAM LEADER

Jan 2014 – Aug 2015 | Raipur, India

Successfully designed and executed a test rig for experimental investigation of **Organic Rankine Cycle** using off-the-shelf automotive scroll compressor as expander. Under the guidance of **Prof Surendra Kachhwaha** and Office of Research and Student Programs (ORSP).

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. Also assisted in client interaction and negotiation meetings.

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 reports scheduling for de-mineralization plant for an active 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 de-mineralization (DM) and reverse osmosis water treatment plants.
- Participated in project engineering of two semi-automatic DM plants in the automobile industry.

AWARDS

2015	1 st position	ACREX Quiz by ISHRAE at respective university and chapter levels. Stood among national Top 20
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