

Rahi Shah

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EDUCATION	Columbia University , New York, NY <i>Master of Science</i> , Mechanical Engineering, Feb 2017	GPA 3.5
	Pandit Deendayal Petroleum University , Gujarat, India <i>Bachelor of Technology</i> , Mechanical Engineering, June 2015	GPA 3.8
PROJECTS	Multimodal Satellite Rainfall Measurement for Index Insurance: A Global Grand Challenge project to more accurately measure rainfall across farming regions in developing countries so that insurers can make more informed and rapid decisions for paying out to small-scale farmers with insurance against seasonal crop loss. Responsible for web scraping and logging data to Amazon AWS.	
	Mapping of Homicidal Bias in the US: Exploratory analysis of FBI's homicide statistics from 1980 onwards to find trends in race, gender, age and location of homicide victims across the US.	
	Hybrid Vertical Comb-Drive Model for Scanning Micro-Mirrors: Investigative research on a novel design for vertical comb-drive micro-mirrors. The design exhibits approximately 35 percent enhancement in scan angle coverage over the staggered vertical comb-drive designs. Skills required: MEMS design, mathematical and thermal modeling and structural analysis.	
	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: mathematical modeling, data analysis and validation.	
	Selective Emission Properties of PDMS thin-films for Passive Cooling: Attempted to exploit the selective emission properties of Polydimethylsiloxane for night-time passive cooling applications of sheet metal rooftops. Constructed mathematical models for optimizing the thin film thickness and heat transfer and validated against experimental data. Skills required: Thermal design, modeling, data acquisition and analysis.	
COMPUTER SKILLS	Languages: C++, Python, R, Wolfram, SQL, L ^A T _E X. Applications: Solidworks, Creo, AutoCAD, ANSYS (Fluent, Icepak & Mechanical) , MATLAB, LabVIEW, Open Modelica, Primavera, Tableau.	
EXPERIENCE	Estimator	Henick-Lane Inc.
	Sept '16 - December '16, Feb '17 - Present	New York, NY
	Responsibilities include but are not limited to designing, estimating, scheduling and value engineering of high-rise as well as residential HVAC projects. Successfully led the departmental migration to new platforms for better RFP management and decrease of bid lag time.	

Research Assistant -Swamy Lab

Aug '15 - Aug '16

Columbia University

New York, NY

As a 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

May '14 - July '14

L&T Power

Baroda, India

Interned in 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

May '13 - July '13

Membrane System Specialists

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 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

CERTIFICATES

LEED Green Associate

INTERESTS

Data Science, Applied Physics, Thermal Engineering, Energy Engineering and Machine Learning and Natural Language Processing.