#### Name Dr. Akash Bhavsar

# **Designation Program Coordinator & Assistant Professor, Mechanical Engineering**

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School: School of Technology

### **Research Interest:**

- Optimization
- Mathematical Modeling
- Thermal System Design
- Energy Audit & Management
- HVAC
- RAC
- CFD



Degree	Subject	University	Year
PhD	<b>Mechanical</b>	<u>Madhav</u>	2022
	Engineering	<u>University</u>	
<u>MS</u>	<b>Mechanical</b>	University of Utah,	<u>2012</u>
	<b>Engineering</b>	USA (Globally	
		ranked among top	
		250 universities)	
		(Graduate	
		Research Scholar,	
		National Science	
		Foundation (NSF))	
<u>BE</u>	Mechanical	<b>Gujarat University</b>	<u>2009</u>
	Engineering		

## **Professional Experience:**

From	Period	Position	Organisation
August 2017 to	5 years	Program	<b>GSFC University</b>
<u>Present</u>		<b>Coordinator and</b>	
		<b>Assistant Professor</b>	
July 2016 to	1 year 2 months	Assistant Professor	Silver Oak
August 2017			College of



			Engineering and Technology
<u>January 2016 to</u> <u>July 2016</u>	7 Months	Division Manager, Chiller Water Systems	Vallabh Aircon
Sptember 2014 to November 2015	1 Year 4 months	Mechanical Engineer	Diversified Maintenance Systems
May 2012 to September 2014	2 years 4 months	Research Engineer, Mechanical Department	Van Boerum and Frank Associates

#### **Teaching Engagements:**

Title	Course Code	Class Name	School Name
Energy	<u>20ME701</u>	<b>BTech</b>	School of
<b>Management</b>			<b>Technology</b>
System			
Refrigeration and	20ME604	<b>BTech</b>	School of
Air Conditioning			<b>Technology</b>
Power Plant	20ME801	BTech	School of
Engineering			<b>Technology</b>

### **Publications:**

- 1 Mathematical model of cycad cones' thermogenic temperature responses: Inverse calorimetry to estimate metabolic heating rates, Journal of Theoretical Biology, 87-96, 2012
- 2 Experimental investigation of diesel engine operating parameters for mixture of acetylene and turpentine oil with diesel by design of experiment, International Journal for Innovative research in Science and Technology, 11-16, 2017
- 3 Finite Element Analysis (FEM) of spent fuel rod for study of effect of uniaxial tensile stress on crack propagation and structural stability, International journal of technical innovation in modern engineering & science
- 4 Study of effect of uniaxial tensile stress on crack propagation and structural stability with finite element analysis, Journal of Engineering technologies and Innovative research
- Flat plate collector solar air heater" simulation and analysis, Investigations in Flate Plate Collector, International journal of technical innovation in modern engineering & science
- 6 Thermal and Economic analysis of solar organic rankine cycle, International journal of scientific research in science, engineering and technology
- Finite element analysis of uniaxial tensile stress on metal plate with different crack characteristics to understand degradation, International journal of scientific research in science, engineering and technology

- 8 CFD analysis of convection for vertical plate to understand temperature and velocity degradation due to thermal stress, Aut Aut
- 9 Optimization of performance of heat exchanger through nano fluid particles, International journal of scientific research in science and technology

### **Awards/Recognitions:**

- Graduate Research Scholar from National Science Foundation (NSF), 2009 to 2012
- Graduate Scholar Award from American Society of Heat Ventilation
  Air-conditioning and Refrigeration Engineers (ASHRAE)