

# Sustainability Lab

Advancing computational sustainability through machine learning, sensing technologies, and data-driven research

INDIAN INSTITUTE OF TECHNOLOGY GANDHINAGAR

Open positions:

PhD Scholars

Postdocs

Research Associates/JRF

Research Interns

PUBLISHED AT

NeurIPS

AAAI

UbiComp

IMWUT

KDD

BuildSys

CSCW

JCSS

## RECENT RECOGNITION

### SIGEnergy Rising Star Award

Prof. Nipun Batra, 2025

### Test of Time Award (NILMTK)

Prof. Nipun Batra, 2025

### Microsoft Research PhD Award

Zeel B Patel, 2024

### Heidelberg Laureate Forum

Rishiraj Adhikary, 2024

### Fulbright-Nehru Fellowship

Rishiraj Adhikary, 2022

### UbiComp Borriello Award Finalist

Rishiraj Adhikary, 2023

### President's Gold Medal (MTech)

Ankita Jain, 2023

### Prime Minister Research Fellowship

Rishiraj Adhikary

## WHAT WE WORK ON

### Air Quality & Climate

Satellite CV for pollution monitoring, LLM-based policy decision support

*NeurIPS '23 '25, AAAI '26, JCSS '25*

### Health Sensing

Thermal imaging, wearables, respiratory monitoring

*UbiComp '24, ACM Health '23*

### Energy Analytics

NILM, smart grid optimization, time-series forecasting

*Test of Time Award 2025 (NILMTK)*

### Foundation Models

LLMs, VLMs, and multi-modal ML for sustainability

*Emerging research area*

Tech:

LLMs

VLMs

Foundation Models

Gaussian Processes

Deep Learning

Time-Series

## COMPUTING INFRASTRUCTURE

4x NVIDIA A100 (80GB) | 2x RTX A5000 | 2x RTX A4000 | RTX A2000 | Titan XP

Dedicated resources for lab members - train large models locally

## ALUMNI ACHIEVEMENTS

Our alumni span top industry labs, global PhD programs, and competitive fellowships.

### INDUSTRY POSITIONS

Google DeepMind  
Microsoft Research  
Oracle  
Salesforce  
CRED  
Skan.ai

### GRADUATE PROGRAMS

PhD at UMass Amherst  
PhD at IIT Gandhinagar  
MS at Carnegie Mellon University  
MS at UC San Diego  
MS at New York University  
MS at California Institute of Technology  
MS at ETH Zurich

### FELLOWSHIPS & AWARDS

Fulbright Fellowship  
Microsoft Research PhD Award  
Prime Minister Research Fellowship  
Outstanding Research Gold Medal  
Heidelberg Laureate Forum

## Ready to Join Our Research?

### Who should join

- PhD/MS/BTech students interested in ML + real-world impact
- Strong foundations in ML, CV, time-series, or systems
- Motivation to publish at top venues (NeurIPS, AAAI, UbiComp, JCSS)

### What you get

- Top-tier publications + datasets with real-world deployment
- Policy-facing impact (government partnerships)
- Strong alumni outcomes (Google DeepMind, CMU, ETH Zurich, fellowships)

Join a lab focused on high-quality research that creates real-world impact. We emphasize collaborative work, rigorous methodology, and meaningful contributions to sustainability.

Contact Prof. Nipun Batra

Visit Our Website

How to apply: Email with CV, transcript, and a short paragraph on your research interests. No formal deadline — we recruit year-round.

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