# HARI PRASANNA DAS

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## RESEARCH INTERESTS

Deep Learning | Generative Modeling | Smart Buildings | Computer Vision | IoT

## EDUCATION

**University of California, Berkeley** *2017-Present*
PhD Student in Electrical Engineering and Computer Sciences
Advisor: Costas J. Spanos

**Indian Institute of Technology (IIT), Kharagpur** *2012-2016*
Bachelor of Technology (Honors) in Electrical Engineering
Advisor: Ashok Kumar Pradhan

## EXPERIENCE

**Mentor Graphics (India)**, Research and Development (R&D) Engineer *2016-2017*

**Airbus (India)**, Summer Intern *2015*

## SELECTED AWARDS AND FELLOWSHIPS

2020 Best Poster Runners-up, Berkeley Energy Resource Collaborative (BERC) Energy Summit
2018-20 SinBerBEST Graduate Fellowship, National Research Foundation (NRF), Singapore
2019 NSF Award to attend Doctoral Consortium on Computational Sustainability
2019 Young Scientist Award, Global Young Scientists Summit (GYSS), Singapore
2017-18 Department Fellowship, Electrical Engineering and Computer Sciences, UC Berkeley
2012-16 Undergraduate Merit-cum-means Scholarship, IIT Kharagpur
2012 Outstanding Performance Award, Ministry of Science and Technology, Government of India

## PREPRINTS

P4. **Hari Prasanna Das** et al. Cdcgen: Cross-domain conditional generation via normalizing flows and adversarial training. *Under Preparation*, 2020

P3. **Hari Prasanna Das** et al. Synthetic data augmentation for class balancing in building tabular datasets. *Under Preparation*, 2020

P2. **Hari Prasanna Das**, Pieter Abbeel, and Costas J. Spanos. Likelihood contribution based multi-scale architecture for generative flows. *arXiv preprint:1908.01686*, 2019

P1. Ioannis C Konstantakopoulos, **Hari Prasanna Das**, Andrew R Barkan, Shiying He, Tanya Veeravalli, Huihan Liu, Aummul Baneen Manasawala, Yu-Wen Lin, and Costas J Spanos. Design, benchmarking and explainability analysis of a game-theoretic framework towards energy efficiency in smart infrastructure. *arXiv preprint:1910.07899*, 2019

## JOURNAL PUBLICATIONS

J2. Divya Periyakoil, **Hari Prasanna Das**, Clayton Miller, Costas J. Spanos, and Ndola Prata. Environmental exposures in singapore schools: An ecological study. *International Journal of Environmental Research and Public Health*, 18.4:1843, 2021

J1. Shichao Liu, Stefano Schiavon, **Hari Prasanna Das**, Ming Jin, and Costas J. Spanos. Personal thermal comfort models with wearable sensors. *Building and Environment*, 162:106281, 2019

## CONFERENCE PUBLICATIONS

C9. **Hari Prasanna Das** and Ioannis Konstantakopoulos et al. Do occupants in a building exhibit patterns in energy consumption? analyzing clusters in energy social games. In *Workshop on Tackling Climate Change with Machine Learning, Advances in Neural and Information Processing Systems* ***(NeurIPS)***, 2020

C8. Ming Jin, Ruoxi Jia, **Hari Prasanna Das**, Wei Feng, and Costas Spanos. Biscuit: Building intelligent system customer investment tool. In *Wornshop on Tackling Climate Change with Machine Learning, International Conference on Learning Representations* ***(ICLR)***, 2020

C7. **Hari Prasanna Das** and Ioannis Konstantakopoulos et al. Design, benchmarking and graphical lasso based explainability analysis of an energy game-theoretic framework. In *Workshop on Tackling Climate Change with Machine Learning, Advances in Neural and Information Processing Systems* ***(NeurIPS)***, 2019

C6. **Hari Prasanna Das** and Ioannis Konstantakopoulos et al. A novel graphical lasso based approach towards segmentation analysis in energy game-theoretic frameworks. In *2019 18th IEEE International Conference On Machine Learning And Applications* ***(ICMLA)***, pages 1702–1709. IEEE, 2019

C5. Han Zou, Jianfei Yang, **Hari Prasanna Das**, Huihan Liu, Yuxun Zhou, and Costas J Spanos. Wifi and vision multimodal learning for accurate and robust device-free human activity recognition. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition* ***(CVPR)*** *Workshops*, 2019

C4. Han Zou, **Hari Prasanna Das**, Jianfei Yang, Yuxun Zhou, and Costas Spanos. Machine learning empowered occupancy sensing for smart buildings. In *Workshop on Climate Change: How Can AI Help?, International Conference on Machine Learning* ***(ICML)***, 2019

C3. Han Zou, Yuxun Zhou, Jianfei Yang, Huihan Liu, **Hari Prasanna Das**, and Costas J. Spanos. Consensus adversarial domain adaptation. In ***AAAI*** *Conference on Artificial Intelligence*, 2019

C2. Shichao Liu, Ming Jin, **Hari Prasanna Das**, C. Spanos, and S. Schiavon. Personal thermal comfort models based on physiological parameters measured by wearable sensors. *Proceedings of the Windsor Conference*, pages 431–441, 2018

C1. **Hari Prasanna Das** and Ashok Kumar Pradhan. Development of a micro-phasor measurement unit for distribution system applications. In *National Power Systems Conference (NPSC), 2016*, pages 1–5. IEEE, 2016

## TECHNICAL SKILLS

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|---|---|
| **Programming Languages** | Python, C, C++, Matlab, R |
| **AI Frameworks** | PyTorch, TensorFlow, Scikit-Learn, Numpy, Matplotlib, Pandas |

## TEACHING EXPERIENCE

Head Content GSI (Graduate Student Instructor), UC Berkeley — Fall 2020
EECS 127/227 AT: Optimization Models in Engineering, with Prof. Venkat Anantharam

Graduate Student Instructor, UC Berkeley — Fall 2019
EECS 127/227 AT: Optimization Models in Engineering, with Prof. Alexandre M. Bayen

## PROFESSIONAL SERVICE

**Lead Organizer**, Workshop on Tackling Climate Change with Machine Learning, International Conference on Machine Learning (ICML) 2021

**Programs Committee Member, Climate Change AI** 2020

**Lead Organizer**, Doctoral Consortium on Computational Sustainability 2020

**Lead Organizer**, 1st and 2nd International Workshop on Applied Machine Learning for Intelligent Energy Systems (AMLIES), ACM e-Energy Conference 2019, 2020

**Lead Organizer**, Computational Sustainability Open Graduate Seminar (COGS) 2020

**Program Committee Member**, International Workshop on Reinforcement Learning for Energy Management in Buildings and Cities (RLEM), BuildSys Conference 2020

**Program Committee Member**, Workshop on AI for Energy-Cyber-Physical Systems, International Conference on Applied Energy (ICAE) 2018

**Student Reviewer**, Graduate Admissions Committee, Department of EECS, UC Berkeley, 2018

**Faculty Interview Coordinator**, Department of EECS, UC Berkeley 2018

## DIVERSITY AND INCLUSION INITIATIVES

**STEM FYI Ambassador** 2020-21
STEM FYI: First Year Initiative aims to enhance the retention and professional development of underrepresented, first-generation, women, and diverse scholars across all STEM fields

**GiGS Mentor** 2020-21
GiGS: Getting into Graduate School is an initiative by the Office for Graduate Diversity (OGD) at UC Berkeley to encourage and prepare undergraduate students to select and apply in graduate school

**Project Leader**, SMASH 2018
SMASH: Summer Math and Science Honors Academy is a college-prep program serving local high school students from traditionally marginalized group in STEM

## REFERENCE

Prof. Costas J. Spanos, Andrew S. Grove Distinguished Professor, Department of EECS, UC Berkeley
Director, CITRIS and the Banatao Institute
Interim Director and CEO, Berkeley Education Alliance for Research in Singapore
spanos@berkeley.edu, spanos@citris-uc.org