

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, Shiyong 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 *Workshop 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

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 under-represented, 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