PRIYA L. DONTI

pdonti@andrew.cmu.edu | www.priyadonti.com | @priyald17

EDUCATION

Carnegie Mellon University, Pittsburgh, PA, USA 2016–2022
Ph.D., Computer Science Dept. and Dept. of Engineering & Public Policy
Dissertation title: "Bridging Deep Learning and Electric Power Systems"
Advisors: Zico Kolter, Inês Azevedo

Harvey Mudd College, Claremont, CA, USA 2011–2015
B.S. Computer Science and Mathematics, Emphasis in Environmental Analysis
Graduated with High Distinction, GPA: 3.93

SELECTED HONORS AND AWARDS

ACM SIGEnergy Doctoral Dissertation Award	2022
MIT Technology Review "35 Innovators Under 35" (global list)	2021
Best Paper Runner-Up, ACM Int'l Conf. on Future Energy Systems (ACM e-Energy)	2021
Winner - Lightning Talks Competition, Duke Energy Data Analytics Symposium	2020
Best Paper Honorable Mention, International Conference on Machine Learning (ICML)	2019
Best Poster, Power and Energy Conference at Illinois (PECI)	2019
Highlighted Paper Award, NeurIPS AI for Social Good workshop	2018
Computing Research Association (CRA) Outstanding Undergraduate Award Finalist	2014

SELECTED FELLOWSHIPS AND GRANTS

Siebel Scholars Program	2021
US Department of Energy (DOE) Computational Science Graduate Fellowship	2017–2021
US National Science Foundation Graduate Research Fellowship	2015–2017
Thomas J. Watson Fellowship	2015–2016
Udall Undergraduate Scholarship Honorable Mention	2014
Harvey Mudd President's Scholarship	2011-2015

PUBLICATIONS

Full Papers

Employing Adversarial Robustness Techniques for Large-Scale Stochastic Optimal Power Flow
Power Systems Computation Conference (2022)
Aayushya Agarwal, **Priya L. Donti**, J. Zico Kolter, Larry Pileggi

Aligning artificial intelligence with climate change mitigation
Nature Climate Change (2022)
Lynn H. Kaack, **Priya L. Donti**, Emma Strubell, George Kamiya, Felix Creutzig, David Rolnick

Adversarially Robust Learning for Security-Constrained Optimal Power Flow
Advances in Neural Information Processing Systems (NeurIPS) 2021
Priya L. Donti*, Aayushya Agarwal*, Neeraj Vijay Bedmutha, Larry Pileggi, J. Zico Kolter

Machine Learning for Sustainable Energy Systems
Annual Review of Environment and Resources (2021)
Priya L. Donti, J. Zico Kolter

Enforcing Policy Feasibility Constraints through Differentiable Projection for Energy Optimization
ACM International Conference on Future Energy Systems (ACM e-Energy) 2021

Bingqing Chen*, **Priya L. Donti***, Kyri Baker, J. Zico Kolter, Mario Bergés
🏆 ***Best paper runner-up*** at ACM e-Energy 2021

DC3: A learning method for optimization with hard constraints
International Conference on Learning Representations (ICLR) 2021
Priya L. Donti*, David Rolnick*, J. Zico Kolter

Enforcing robust control guarantees within neural network policies
International Conference on Learning Representations (ICLR) 2021
Priya L. Donti, Melrose Roderick, Mahyar Fazlyab, J. Zico Kolter

Tackling Climate Change with Machine Learning
David Rolnick, **Priya L. Donti**†, Lynn H. Kaack, Kelly Kochanski, Alexandre Lacoste, Kris Sankaran, Andrew Slavin Ross, Nikola Milojevic-Dupont, Natasha Jaques, Anna Waldman-Brown, Alexandra Luccioni, Tegan Maharaj, Evan D. Sherwin, S. Karthik Mukkavilli, Konrad P. Kording, Carla Gomes, Andrew Y. Ng, Demis Hassabis, John C. Platt, Felix Creutzig, Jennifer Chayes, Yoshua Bengio
Forthcoming in *ACM Computing Surveys* (2021). [Preprint published 2019.]
† *Co-editor of full paper, and sole author of Electricity Systems section.*

SATNet: Bridging deep learning and logical reasoning using a differentiable satisfiability solver
International Conference on Machine Learning (ICML) 2019
Po-Wei Wang, **Priya L. Donti**, Bryan Wilder, and J. Zico Kolter
🏆 ***Best paper honorable mention*** at ICML 2019 (top 1% of accepted papers)

Matrix Completion for Low-Observability Voltage Estimation
IEEE Transactions on Smart Grid (2019)
Priya L. Donti, Yajing Liu, Andreas J. Schmitt, Andrey Bernstein, Rui Yang, Yingchen Zhang

How Much Are We Saving after All? Characterizing the Effects of Commonly Varying Assumptions on Emissions and Damage Estimates in PJM
Environmental Science & Technology (2019)
Priya L. Donti, J. Zico Kolter, Inês Lima Azevedo

Task-based End-to-end Model Learning in Stochastic Optimization
Advances in Neural Information Processing Systems (NeurIPS) 2017
Priya L. Donti, Brandon Amos, J. Zico Kolter

Policy Reports

Climate Change and AI: Recommendations for Government Action
Global Partnership on AI (GPAI) Report (2021)
Peter Clutton-Brock*, David Rolnick*, **Priya L. Donti***, Lynn H. Kaack*, et al.

Artificial Intelligence and Climate Change: Opportunities, Considerations, and Policy Levers to Align AI with Climate Change Goals
Heinrich Böll Foundation E-Paper (2020)
Lynn H. Kaack, **Priya L. Donti**, Emma Strubell, David Rolnick

Workshop Papers

An adversarially robust approach to security-constrained optimal power flow
ML for Engineering Modeling, Simulation, and Design (ML4Eng) workshop at NeurIPS 2020
Neeraj Vijay Bedmutha, **Priya L. Donti**, J. Zico Kolter

Forecasting Marginal Emissions Factors in PJM
Tackling Climate Change with Machine Learning workshop at NeurIPS 2020
Amy Wang, **Priya L. Donti**

A Call for Universities to Develop Requirements for Community Engagement in AI Research
Position paper at the CHI 2020 Fair & Responsible AI Workshop
Emily Black, Joshua Williams, Michael A. Madaio, **Priya L. Donti**

Inverse Optimal Power Flow: Assessing the Vulnerability of Power Grid Data
Priya L. Donti, Inês Lima Azevedo, J. Zico Kolter
🏆 ***Highlighted paper*** at the AI for Social Good workshop at NeurIPS 2018
🏆 ***Best poster*** at the Power and Energy Conference at Illinois (PECI) 2019

Predicting the Quality of User Experiences to Improve Productivity and Wellness
Proceedings of the Twenty-Ninth AAAI Conference (poster abstract, 2015)
Priya L. Donti, Jacob Rosenbloom, Alex Gruver, James C. Boerkoel Jr.

Exploring Active and Passive Team-Based Coordination
Proceedings of the AAAI 2014 Fall Symposium on AI for HRI (2014)
Priya L. Donti, James C. Boerkoel Jr.

SELECTED PROFESSIONAL SERVICE

Climate Change AI, *Co-founder and Chair* (2019–present)
Lead organization to catalyze impactful work in climate change and machine learning via workshops, grants programs, educational initiatives, community-building platforms, and policy engagement.

Catalyst Cooperative, *Advisory Board Member* (2020–present)
Advise initiative aimed at increasing the usability and accessibility of public energy data.

Creative Destruction Lab, *Lab Scientist* (2020–present)
Provide guidance to startups and perform technical evaluations in CDL-Paris climate stream.

CMU Computer Science Faculty Hiring Committee, *Student Representative* (2020–2021)
Participated in the evaluation and hiring of faculty candidates.

CMU Computer Science PhD Admissions, *AI Area Reader and Diversity Analyst* (2019)
Evaluated applications, analyzed diversity, presented recommendations to departmental leadership.

OurCS, *Student Organizer* (2017, 2019)
Co-organized three-day research-focused workshop for undergraduate women in computer science.

CMU Computer Science PhD Admissions Open House, *Student Organizer* (2017)
Co-organized talks and activities for students admitted to the CMU Computer Science PhD program.

CMU Computer Science Dept. Doctoral Review Committee, *Member* (2017–present)
Serve on official advisory committee to the Department Head and the Director of the PhD Program.

Reviewing

Reviewer (papers): International Conference on Machine Learning (ICML; top 10% reviewer 2021), Conference on Neural Information Processing Systems (NeurIPS; top 10% reviewer 2020 & 2022), International Conference on Learning Representations (ICLR), International Conference on Artificial Intelligence and Statistics (AISTATS), Proceedings of the National Academy of Sciences (PNAS), IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Transactions on Smart Grid, IEEE COINS, IEEE SaTML, Women in Machine Learning (WiML) Workshop, NeurIPS/ICML/ICLR workshops (ML4D series, ML4Eng, Differentiable Programming, Tackling Climate Change with Machine Learning series)

Meta-reviewer (papers): Tackling Climate Change with Machine Learning workshop series

Reviewer (grants): Vinnova AI in the Service of Climate, ICLEI AI4Cities

Process Chair (grants): Climate Change AI Innovation Grants program

EXPERIENCE

Massachusetts Institute of Technology, *Assistant Professor*, Cambridge, MA, USA Sept 2023–

- Starting new position in the Dept. of Electrical Engineering and Computer Science (EECS).

Cornell Tech, *Runway Startup Postdoc*, New York, NY, USA Sept 2022–Aug 2023

- Serving as the full-time Executive Director of Climate Change AI.

DeepMind, *Research Scientist Intern*, Remote Jun–Nov 2021

- Led research on physics-informed deep learning methods for weather forecasting.
- Advised on company-wide Climate & Sustainability initiatives.

National Grid ESO, *Consultant*, Wokingham, UK Jun–Jul 2019

- Implemented machine learning methods for granular forecasting of electricity load (at the grid supply point level), which were deployed UK-wide.

National Renewable Energy Lab, *PhD Intern*, Golden, CO, USA May–Aug 2018

- Conducted research on matrix completion methods for distribution system voltage estimation.

Thomas J. Watson Fellowship, *Watson Fellow*, Global Jul 2015–Aug 2016

- Conducted expert interviews on next-generation power systems in five countries (Germany, India, South Korea, Japan, and Chile), as part of a year-long fellowship.

Harvey Mudd College, *Undergraduate Researcher*, Claremont, CA, USA Jan 2014–Jul 2015

- Led the "Productivity and Wellness Pal" research project, which aimed to provide individualized, data-driven recommendations to improve student productivity and wellness.

PotaVida, Inc., *Global Clinic Team Member*, Claremont, CA, USA Sep 2014–May 2015

- Enhanced PotaVida's low-cost solar water disinfection device as part of Global Clinic, a year-long senior capstone project at Harvey Mudd College.

Crowdy, Inc., *Lead Software Engineer*, Claremont, CA, USA Sep 2013–Aug 2014

- Developed iOS app for Crowdy, an event-based social networking startup.

Google, *Engineering Intern*, Mountain View, CA, USA May–Aug 2013

- Implemented web and Android app functionality for PACO, a user experience surveying tool.

Harvey Mudd Games Team, *Undergraduate Researcher*, Claremont, CA, USA Jun–Aug 2012

- Created and tested educational games for elementary and middle school students.

SELECTED PROGRAM ORGANIZATION

Workshop: The Role of AI in Responding to Climate Challenges (co-chair)
Upcoming three-day symposium at the *AAAI Fall Symposium Series*, Nov 2022

Grants Program: Climate Change AI Innovation Grants Program (co-lead, process chair)
2M USD global grants program to fund research in climate change and machine learning, 2021–2022

Panel: AI for Climate Action (co-lead organizer, moderator)
At the *United Nations Climate Change Conference (COP26)* (German Pavilion), Nov 2021

Conference: International Symposium on Sustainable Systems and Technology (theme chair)
Co-chair of *Computational Tools for Sustainability* track, Jun 2021

Workshop: Tackling Climate Change with Machine Learning (co-organizer)
At the *Conference on Neural Information Processing Systems (NeurIPS)*, Dec 2020

Workshop: Machine Learning for Engineering Modeling, Simulation, and Design (co-organizer)
At the *Conference on Neural Information Processing Systems (NeurIPS)*, Dec 2020

Conference: TEDxClimateChangeAI (lead organizer)
Held as part of Countdown, TED's initiative on climate change, Oct 2020

Workshop: Tackling Climate Change with Machine Learning (lead organizer)
Five-day workshop at the *International Conference on Learning Representations (ICLR)*, Apr 2020

Workshop: Tackling Climate Change with Machine Learning (lead organizer)
At the *Conference on Neural Information Processing Systems (NeurIPS)*, Dec 2019

Panel: AI Applications in Climate Mitigation and Adaptation (co-lead organizer, moderator)
At the *United Nations Climate Change Conference (COP25)* (Chile Pavilion), Dec 2019

Conference: CompSustNet Doctoral Consortium (lead organizer)
Computational Sustainability Network annual conference, Oct 2019

Seminar Series: CompSust Open Graduate Seminar (COGS) (lead organizer)
Virtual webinar for Computational Sustainability Network, 2018–2020

Workshop: Climate Change: How Can AI Help? (co-organizer)
At the *International Conference on Machine Learning (ICML)*, Jun 2019

SELECTED PUBLICITY

News Items Podcast with John Ellis, *How A.I. Can Help Us Fight Climate Change*, Sep 2021
Bloomberg, *Artificial Intelligence Could Dramatically Speed Up Climate Action*, Jul 2021
MIT Technology Review, *35 Innovators Under 35*, Jun 2021
The Interchange podcast, *Beyond Forecasting: Artificial Intelligence Is a Powerful Decarbonization Tool*, Feb 2020; and *How A.I. Will Revolutionize Climate Tech*, Jun 2021
Future of Life Institute podcast, *Tackling Climate Change with Machine Learning*, Oct 2019
ScienceDaily, *Are we underestimating the benefits of investing in renewable energy?*, Oct 2019
National Geographic, *How artificial intelligence can tackle climate change*, Jun 2019
MIT Technology Review, *Here are 10 ways AI could help fight climate change*, Jun 2019
Pittsburgh Post-Gazette, *Pittsburgh libraries join initiative to protect data*, Apr 2017

TEACHING

Carnegie Mellon Future Faculty Program
Engaging in multi-semester training program for course design and pedagogy (2019–present).

Tutorial: Climate Change and ML: Opportunities, Challenges, and Considerations, ICML
Tutorial at International Conf. on Machine Learning, with David Rolnick and Lynn Kaack (Jul 2022).

Guest Lecture: Tackling Climate Change with Machine Learning, MIT
Taught session on climate change and machine learning in College of Computing class (May 2022).

Guest Lecture: Energy Systems, Columbia University
Taught session on energy systems and machine learning to computer science students (Feb 2022).

Guest Lecture: Machine Learning in the Electric Power Sector, Hertie School
Taught session on machine learning and electric power to policy students (Dec 2021).

Tutorial: Tackling Climate Change with Machine Learning, On Deck Climate Tech Fellowship
Taught basics of machine learning to climate tech entrepreneurs (Mar 2021, Aug 2021).

Guest Lecture: Climate Change and Machine Learning, Terra.do
Taught basics of machine learning and climate change to a tech audience (Jan 2021, May 2021).

Tutorial: Climate Change 101 for ML Practitioners, ICLR 2020 climate change workshop
Taught basics of climate change to machine learning researchers (Apr 2020).

Volunteer Instructor: TechNights, Carnegie Mellon University
Taught session on logic puzzles to middle school girls (Feb 2020).

Guest Lecture: Climate Change and Machine Learning, Winchester-Thurston High School
Taught basics of machine learning and climate change to a high school class (Nov 2019).

Teaching Assistant: Graduate Artificial Intelligence, Carnegie Mellon University
Wrote homework and exam questions, held office hours, and graded work (Spring 2018 semester).

Teaching Assistant: Artificial Intelligence, Harvey Mudd College
Held office hours and graded work (Fall 2014 and Spring 2015 semesters).

Teaching Assistant: Algorithms, Harvey Mudd College
Held office hours and graded work (Spring 2015 semester).

Writing Center Consultant, Harvey Mudd College
Provided feedback on student papers and presentations, ran skills workshops (Sep 2012–May 2015).

STUDENTS MENTORED

Thomas Wright, B.S. student at McGill University (2021–2022)
Topic: Fast machine learning approximations to unit commitment in electric power systems.
Co-supervised with David Rolnick.

Neeraj Vijay Bedmutha, M.S. student at Carnegie Mellon University (2020–2021)
Topic: Adversarially robust learning for security-constrained DC optimal power flow.
Published workshop paper at ML4Eng (NeurIPS 2020), follow-on full paper at NeurIPS 2021.

Marissa Liu, B.S. student at Western University (2020–2021)
Topic: Task-based end-to-end deep learning models for forecasting marginal emissions factors.
Undergraduate thesis.

Amy Wang, B.S. student at Western University (2019–2021)
Topic: Exploring machine learning and optimization methods for forecasting marginal emissions factors.
Undergraduate thesis, published workshop paper at Tackling Climate Change with ML (NeurIPS 2020).

INVITED TALKS AND PANELS

CRA Snowbird, *Lightning Talk: Tackling Climate Change with Machine Learning*, Jul 2022
CPAIOR, *Optimization-in-the-loop AI for energy and climate*, Jun 2022
Pacific Northwest National Lab, *Optimization-in-the-loop AI for energy and climate*, Jun 2022
ACM 75th Anniversary Celebration, *Panel: Global Impact*, Jun 2022
University of Washington Data Science, *Tackling Climate Change with Machine Learning*, Jun 2022
META AI, *Climate Change with Machine Learning*, May 2022
Hisar Coding Summit, *Tackling Climate Change with Machine Learning*, Apr 2022
Dartmouth New Energy Series, *Tackling Climate Change with Machine Learning*, Mar 2022
UNEP Digital Discovery Session, *Using Artificial Intelligence for Climate Action*, Mar 2022
National Academies, *Panel: ML/AI in Weather, Climate and Earth System Science*, Feb 2022
Women in Data Science, *Tackling Climate Change with Machine Learning*, Jan 2022
PARC, *Incorporating power system physics into deep learning via implicit layers*, Dec 2021
Hasso Plattner Institute, *Tackling Climate Change with Machine Learning*, Dec 2021
AI for Climate Global Forum, *Fireside Chat: AI for Net Zero*, Dec 2021
Conference on AI for People, *Tackling Climate Change with Machine Learning*, Nov 2021
McGill University, *Enforcing robust control guarantees within neural network policies*, Nov 2021

Institute of Analytics Professionals of Australia, *Tackling Climate Change with Machine Learning*, Nov 2021
Goethe Institute Festival: When Machines Dream the Future, *Panel: Alternative AI Futures?*, Nov 2021
San Diego Zoo Wildlife Alliance, *Tackling Climate Change with Machine Learning*, Nov 2021
Global Partnership on AI *Climate Change and AI: Recommendations for Gov. Action*, Nov 2021
Georgetown Law, *Panel: AI's Role in Addressing and Exacerbating Climate Change*, Oct 2021
Chilean Association of Women in AI, *Opportunities for AI in Tackling Climate Change*, Oct 2021
CMU CEIC Annual Meeting, *Adversarially Robust Learning for N-k SCOPF*, Oct 2021
North Carolina State University, *Tackling Climate Change with Machine Learning*, Oct 2021
ARPA-E DIFFERENTIATE, *Incorp. power system physics into deep learning via implicit layers*, Oct 2021
Agoria "AI in Energy," *ML for climate change mitigation & adaptation in electric power*, Oct 2021
EmTech MIT, *AI for Sustainable Energy Systems*, Sep 2021
Africa Climate Week, *Panel: Responsible Use of Artificial Intelligence for Climate Action*, Sep 2021
The Good AI, *Panel: Applying AI to Tackle the Climate Crisis* (moderator), Sep 2021
Myst AI, *Incorporating power system physics into deep learning via implicit layers*, Sep 2021
GIZ, *ML for climate change mitigation & adaptation in the electric power sector*, Aug 2021
UNDP Bootcamp on AI for the SDGs, *Opportunities for AI in Tackling Climate Change*, Aug 2021
EmTech MIT, *AI for Sustainable Energy Systems*, Aug 2021
DOE CSGF Annual Program Review, *Bridging deep learning and electric power systems*, Jul 2021
Princeton ZERO Lab, *Incorporating power system physics into deep learning via implicit layers*, Jun 2021
Electric Power Research Institute, *Methodological challenges for ML in power systems*, May 2021
CMU DEI seminar, *Climate Change: A Key Consideration for Responsible and Equitable CS*, Apr 2021
AMLD AI & Sustainable Energy, *Incorp. power system physics into deep learning via implicit layers*, Apr 2021
ICLR Responsible AI workshop, *Climate Change: A Key Consideration for Responsible AI*, Apr 2021
ICLR Practical ML for Developing Countries workshop, *Panel: COVID-19 and Climate Change*, Apr 2021
The Globe and Mail, *Panel: Climate Change and AI*, Apr 2021
Lawrence-Livermore National Lab, *Incorp. power system physics into deep learning via implicit layers*, Apr 2021
Columbia Venture Community conference, *Panel: Climate Change, Data, Analytics, and AI*, Mar 2021
Harvey Mudd College "Sus+X" speaker series, *Panel: Career Paths in Sustainability*, Feb 2021
Observer Research Foundation, *AI and Climate Change: A multi-faceted relationship*, Feb 2021
Voices of Data Science at UMass Amherst, *Panel: Data Science for the Common Good*, Feb 2021
Environmental Law Institute, *AI and Climate Change: A Multi-faceted Relationship*, Feb 2021
BERC (Berkeley) Energy Summit, *Panel: Big Data and Climate Change*, Feb 2021
Global Engagement & Empowerment Forum, *Panel: Opportunities for AI in Climate Change*, Feb 2021
Climate Crisis AI Hackathon, *Incorporating physics and domain knowledge into deep learning*, Jan 2021
UofT AI Conference, *Incorporating physics and domain knowledge into deep learning*, Jan 2021
Heinrich Böll virtual briefing, *How artificial intelligence could help mitigate climate change*, Dec 2020
The Algo at University College London, *Tackling Climate Change with Machine Learning*, Dec 2020
ML@San Jose State University, *Panel: Saving Our Planet: Climate, Energy, & AI*, Oct 2020
CMU CEIC Annual Meeting, *Inverse OPF: Assessing the Vulnerability of Power Grid Data*, Oct 2020
Energy Innovation Network Enspire, *Tackling Climate Change with Machine Learning*, Sep 2020
Global Indian International School, *Tackling Climate Change with Machine Learning*, Jul 2020
ACM GECCO GreenAI workshop, *Tackling Climate Change with Machine Learning*, Jul 2020
CogX, *Panel: Accelerating Adoption of AI for Climate*, Jun 2020
Engineers for a Sustainable World DigiCon, *Tackling Climate Change with Machine Learning*, Apr 2020
Clean Energy Leadership Institute, *Tackling Climate Change with Machine Learning*, Apr 2020
Microsoft Research, *Tackling Climate Change with Machine Learning*, Dec 2019
CMU AI Seminar, *Tackling Climate Change with Machine Learning*, Nov 2019
University of Massachusetts, *Tackling Climate Change with Machine Learning*, Oct 2019
CMU CEIC Annual Meeting, *Matrix Completion for Low-Observability Voltage Estimation*, Oct 2019
CMU CEIC Annual Meeting, *All models are wrong; let's make them useful*, Oct 2018

CompSust Open Graduate Seminar, *Inverse Optimal Power Flow*, Oct 2018
National Renewable Energy Lab, *Optimization and ML for distribution system state estimation*, Aug 2018
CMU CEDM Annual Mtg., *Char. the uncertainty in damage reductions from interventions in PJM*, May 2018
CMU CEIC Annual Meeting, *Characterizing Marginal Emissions Factors in PJM*, Oct 2017
Instituto Superior Técnico, *Task-based ML & Assessing Effects of Power System Interventions*, Jun 2017

Pingree School Commencement (commencement speaker), Jun 2019
Harvey Mudd College Convocation (alumni keynote), Aug 2017
Harvey Mudd College Convocation (student keynote), Sep 2013

CONTRIBUTED TALKS AND POSTERS

PSCC, *Poster: Employing Adversarial Robustness Techniques for Large-Scale Stochastic OPF*, Jun 2022
University of Illinois Urbana-Champaign, *Optimization-in-the-loop AI for energy and climate*, Apr 2022
McGill University, *Optimization-in-the-loop AI for energy and climate*, Apr 2022
University of Southern California, *Optimization-in-the-loop AI for energy and climate*, Apr 2022
University of Toronto, *Optimization-in-the-loop AI for energy and climate*, Apr 2022
Cornell Tech, *Optimization-in-the-loop AI for energy and climate*, Mar 2022
Stanford University, *Optimization-in-the-loop AI for energy and climate*, Mar 2022
New York University, *Optimization-in-the-loop AI for energy and climate*, Mar 2022
Boston University, *Optimization-in-the-loop AI for energy and climate*, Mar 2022
Massachusetts Institute of Technology, *Optimization-in-the-loop AI for energy and climate*, Mar 2022
Imperial College London, *Optimization-in-the-loop AI for energy and climate*, Mar 2022
University of British Columbia, *Optimization-in-the-loop AI for energy and climate*, Mar 2022
University of Colorado Boulder, *Optimization-in-the-loop AI for energy and climate*, Mar 2022
Brown University, *Optimization-in-the-loop AI for energy and climate*, Mar 2022
TTIC, *Optimization-in-the-loop AI for energy and climate*, Feb 2022
Cornell University, *Optimization-in-the-loop AI for energy and climate*, Feb 2022
George Washington University, *Optimization-in-the-loop AI for energy and climate*, Feb 2022
Duke University, *Optimization-in-the-loop AI for energy and climate*, Feb 2022
Carnegie Mellon University, *Optimization-in-the-loop AI for energy and climate*, Jan 2022
University of Chicago, *Optimization-in-the-loop AI for energy and climate*, Jan 2022
University of Waterloo, *Optimization-in-the-loop AI for energy and climate*, Jan 2022
NeurIPS, *Poster: Adversarially Robust Learning for Security-Constrained OPF*, Dec 2021
EECS Rising Stars, *Poster: Incorp. Power System Physics into Deep Learning via Implicit Layers*, Oct 2021
ACM e-Energy, *Enforcing Policy Feasibility Constraints through Diff. Proj. for Energy Opt.*, Jun 2021
ICLR, *Poster: DC3: A learning method for optimization with hard constraints*, Apr 2021
ICLR, *Poster: Enforcing robust control guarantees within neural network policies*, Apr 2021
NeurIPS ML4Eng workshop, *Poster: An adversarially robust approach to SCOPF*, Dec 2020
NeurIPS climate change workshop, *Poster: Forecasting Marginal Emissions Factors in PJM*, Dec 2020
Duke Energy Data Analytics Symposium, *Inverse OPF: Assessing the Vulnerability of Grid Data*, Nov 2020
CompSustNet Doctoral Consortium, *Tackling Climate Change with Machine Learning*, Oct 2020
ISSST, *Inverse Optimal Power Flow: Assessing the Vulnerability of Power Grid Data*, Jun 2020
CMU Symposium on AI and Social Good, *Tackling Climate Change with Machine Learning*, Apr 2020
CompSustNet Doctoral Consortium, *Tackling Climate Change with Machine Learning*, Oct 2019
CMU CEDM Seminar, *Matrix Completion for Low-Observability Voltage Estimation*, Sep 2019
DOE CSGF Annual Meeting, *Poster: Matrix Completion for Low-Observability Voltage Estimation*, Jul 2019
ICML, *Poster: SATNet: Bridging DL and logical reasoning using a differentiable satisfiability solver*, Jun 2019
CMU Energy Week, *Poster: Inverse Optimal Power Flow*, Mar 2019
Power and Energy Conference at Illinois (PECI), *Poster: Inverse Optimal Power Flow*, Feb 2019
NeurIPS AI for Social Good workshop, *Inverse Optimal Power Flow*, Dec 2018
WiML Workshop, *Poster: Task-based End-to-end Model Learning in Stochastic Optimization*, Dec 2018

NeurIPS Modeling the Physical World workshop, *Poster: Inverse Optimal Power Flow*, Dec 2018
NeurIPS AI for Social Good workshop, *Poster: Inverse Optimal Power Flow*, Dec 2018
CompSustNet Doctoral Consortium, *Matrix Completion for Low-Observability Voltage Estimation*, Sep 2018
CMU CEDM Seminar, *Characterizing Marginal Emissions Factors in PJM*, Oct 2017
DOE CSGF Annual Mtg., *Poster: Task-based End-to-end Model Learning in Stochastic Optimization*, Jul 2018
NeurIPS, *Poster: Task-based End-to-end Model Learning in Stochastic Optimization*, Dec 2017
CompSustNet NSF Review, *Poster: Task-based End-to-end Model Learning in Stochastic Opt.*, Oct 2017
INFORMS, *Task-based end-to-end model learning in stochastic optimization*, Oct 2017
CMU CEDM Annual Mtg., *Poster: Assessing the Emissions Reductions from Interventions*, May 2017
CMU CEDM Seminar, *Assessing the Emissions Reductions from Power Systems Interventions*, Apr 2017
CMU Energy Week, *Poster: Predicting Marginal Generators in Real Time*, Apr 2017

OTHER ACTIVITIES

CMU Tech4Society, *Co-founder and Project Lead* (2016–2020)
Provided technical and data support to local grassroots organizations in Pittsburgh, PA, USA.

Engineers for a Sustainable World, *New Chapter Development Director* (2016–2019)
Developed new collegiate chapters across the United States focused on sustainability and engineering.

Harvey Mudd Sustainability Committee, *Student Representative* (2014–2015)
Worked with college administration to direct and oversee the college's sustainability program.

ESW/MOSS Environmental Club, *Co-President* (2012–2014), *Member* (2011–2015)
Led projects including creation of 1M USD Green Fund, policy outreach, and campus awareness events.

Harvey Mudd College Honor Board, *Class Representative* (2011–2015)
Presided over hearings and participated in discussions regarding the college's honor code.

Science Bus, *Co-president* (2012–2013), *Teacher* (2011–2014)
Created and taught weekly science lessons at 18 elementary school classrooms in Pomona, CA, USA.

Harvey Mudd College Homework Hotline, *Tutor* (2012)
Provided over-the-phone math and science tutoring for students in grades 4–12.

Kumon Math & Reading, *Tutor* (2007–2011)
Graded worksheets and provided one-on-one instruction in preschool–grade 12 math and reading.

ADDITIONAL INFORMATION

Spoken Languages	English (native speaker), Telugu (fluent), Spanish (basic)
Programming Languages	Python, MATLAB (proficient) C, C++, Haskell, R, SQL, Bash, Objective-C, Java (knowledgeable)
Deep Learning Frameworks	PyTorch (proficient), JAX (proficient), TensorFlow (knowledgeable)
Citizenship	USA
Erdős Number	3