PRIYA L. DONTI

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EDUCATION

Carnegie Mellon University Sept. 2016–*Present*
Ph.D. student in Computer Science and Engineering & Public Policy *Pittsburgh, PA, USA*
Advisors: Zico Kolter and Inês Azevedo

Harvey Mudd College Sept. 2011–May 2015
B.S. in Computer Science/Math, Emphasis in Environmental Analysis *Claremont, CA, USA*
Graduated with High Distinction, GPA: 3.93

PUBLICATIONS

Inverse Optimal Power Flow: Assessing the Vulnerability of Power Grid Data
Working paper
Priya L. Donti, Inês Lima Azevedo, J. Zico Kolter (Carnegie Mellon University)

Matrix Completion for Low-Observability Voltage Estimation
Working paper
Priya L. Donti, Andreas J. Schmitt, Andrey Bernstein, Yingchen Zhang (National Renewable Energy Lab)

Characterizing the Uncertainty in Damage Reductions from Interventions and Loads in PJM
Under review
Priya L. Donti, J. Zico Kolter, Inês Lima Azevedo (Carnegie Mellon University)

Task-based End-to-end Model Learning in Stochastic Optimization
Advances in Neural Information Processing Systems (NIPS), December 2018
Priya L. Donti, Brandon Amos, J. Zico Kolter (Carnegie Mellon University)
Link: `https://arxiv.org/abs/1703.04529`

Predicting the Quality of User Experiences to Improve Productivity and Wellness
Proceedings of the Twenty-Ninth AAAI Conference (Poster Abstract), January 2015
Priya L. Donti, Jacob Rosenbloom, Alex Gruver, James C. Boerkoel Jr. (Harvey Mudd College)
Link: `http://goo.gl/YAh3Cd`

Exploring Active and Passive Team-Based Coordination (Poster Abstract)
Proceedings of the AAAI 2014 Fall Symposium on AI for HRI, November 2014
Priya L. Donti, James C. Boerkoel Jr. (Harvey Mudd College)
Link: `http://goo.gl/kH2P9d`

RESEARCH EXPERIENCE

Carnegie Mellon University Sept. 2016–*Present*
Ph.D. Student *Pittsburgh, PA, USA*

· Conducting dissertation research at the intersection of machine learning/deep learning, optimization, power system analysis, and energy policy.

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

· Proposed and implemented a distribution system state estimation technique based on low rank matrix completion augmented with noise-resilient power flow constraints.

Thomas J. Watson Fellowship July 2015–Aug. 2016
Watson Research Fellow *Worldwide*

· Interviewed actors working on Smart Grids and related areas in five different countries (Germany, India, South Korea, Japan, and Chile), as part of a year-long travel fellowship.

· Kept a project blog at `https://priyaswatson.wordpress.com`.

The Productivity and Wellness Pal (PaWPal) Jan. 2014–July 2015
Undergraduate Researcher *Claremont, CA, USA*

· Led studies and research in artificial intelligence to help students maximize their productivity and wellness using individualized recommendations and data visualizations.

Harvey Mudd Games Team July–Aug. 2012
Game Tester and Developer *Claremont, CA, USA*

· Created educational games for elementary and middle school students based on user testing and interactions with students and classroom teachers.

SKILLS

Programming Languages	*Proficient*: Python, MATLAB *Knowledgeable*: R, SQL, Bash, C, C++, Objective-C, Java, Haskell, Scheme, Prolog, SQL, Bash
Deep Learning Frameworks	PyTorch (proficient), TensorFlow (knowledgeable)
Tools	Git, SVN, LaTeX, Unix

RELEVANT COURSEWORK

Graduate:

Machine learning: Advanced Intro. Machine Learning, Artificial Intelligence, Applied Data Analysis, Intermediate Statistics, Convex Optimization

Energy and Climate: Engineering & Economics of Electric Energy Systems, Seminar in Electricity Market Restructuring, Seminar in Low-Carbon Electric Power, Climate Change Mitigation (audit)

Policy: Theory & Practice in Policy Analysis, Quantitative Methods for Policy Analysis, Microeconomics

Undergraduate (summary): Technical and non-technical courses for major in Computer Science/Math and Emphasis in Environmental Analysis. A broad core curriculum covering all major technical fields, as well as an extensive non-technical breadth requirement. (Transcript available upon request.)

OTHER WORK EXPERIENCE

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

· Worked with three team members and the CEO of PotaVida, Inc. to enhance PotaVida's solar water disinfection product as part of Clinic, Harvey Mudd's year-long senior capstone project.

Harvey Mudd College Computer Science Department Sept. 2014–May 2015
Grader & Tutor *Claremont, CA, USA*

· Tutored students in Harvey Mudd's Artificial Intelligence and Algorithms courses.

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

· Developed the iOS app for Crowdy, a social networking platform that seeks to connect users through shared experiences.

Harvey Mudd College Writing Center Sept. 2012–May 2015
Writing Center Consultant *Claremont, CA, USA*

· Consulted student papers/presentations and running writing workshops at HMC and other schools.

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

· Designed and developed a revamped experiment creation process for PACO, an Android experiential sampling tool.

· Set up PACO's testing architecture and optimized communication between the app and web server.

LEADERSHIP EXPERIENCE

CMU Tech4Society Jan. 2017–*Present*
Co-Founder and Project Leader *Pittsburgh, PA, USA*

· Partnering Carnegie Mellon students with local grassroots organizations to provide technical and data support for these organizations' social causes.

Engineers for a Sustainable World July 2016–*Present*
New Chapter Development Director *USA*

· As part of the global leadership team, developing new student chapters across the United States to strengthen the ESW network.

Harvey Mudd Sustainability Commitee Oct. 2014–May 2015
Student Representative from ESW/MOSS *Claremont, CA, USA*

· Worked with Harvey Mudd's administration to set goals for and provide oversight of Harvey Mudd College's sustainability program.

ESW/MOSS Environmental Club Sept. 2011–May 2015
Co-President, 5C Sustainability Liaison *Claremont, CA, USA*

· Led the formation of a Sustainability Committee and Green Fund, creation of a 5C sustainability website, an energy competition, and a presentation to the CPUC about SCE's rate restructuring.

Harvey Mudd College Honor Board Sept. 2011–May 2015
Honor Board Class Representative *Claremont, CA, USA*

· Participated in Honor Board hearings, training, and discussion sessions.

Science Bus Sept. 2012–May 2013
Co-President *Claremont, CA, USA*

· Worked with school administrators, teachers, and college students to create and teach weekly science lessons at 18 elementary school classrooms in Pomona, CA.

MAJOR ACHIEVEMENTS AND AWARDS

DOE Computational Science Graduate Fellowship (National)	Sept. 2017–*Present*
National Science Foundation Graduate Research Fellowship (National)	Sept. 2015–Aug. 2017
Thomas J. Watson Fellowship (National)	Jul. 2015–Aug. 2016
Don Chamberlain CS Research Award (HMC)	May 2015
Radley Prize in Humanities, Social Sciences, and the Arts (HMC)	May 2015
CRA Outstanding Undergraduate Finalist (National)	Dec. 2014
William and Wyllis Leonhard Merit Scholarship (HMC)	Oct. 2014
Udall Scholarship Honorable Mention (National)	Apr. 2014
Dean Chris Sundberg Leadership Prize (HMC)	May 2013
Jean and Joseph Platt Prize (HMC)	Sept. 2012
Harvey Mudd President's Scholarship (4 years)	Sept. 2011–May 2015
National Merit Scholarship Finalist (National)	Sept. 2011–May 2015