
PRIYA L. DONTI

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EDUCATION

Carnegie Mellon University

Ph.D. student in Computer Science and Engineering & Public Policy
Advisors: Zico Kolter and Inês Azevedo

Sept. 2016–*Present*
Pittsburgh, PA, USA

Harvey Mudd College

B.S. in Computer Science/Math, Emphasis in Environmental Analysis
Graduated with High Distinction, GPA: 3.93

Sept. 2011–May 2015
Claremont, CA, USA

PUBLICATIONS

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

Working paper

Priya L. Donti, J. Zico Kolter, Inês Lima Azevedo (Carnegie Mellon University)

Task-based End-to-end Model Learning

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

Ph.D. Student

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

Sept. 2016–*Present*
Pittsburgh, PA, USA

National Renewable Energy Lab

Graduate Intern

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

May–Aug. 2018
Golden, CO, USA

Thomas J. Watson Fellowship

Watson Research Fellow

- 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://prijaswatson.wordpress.com>.

July 2015–Aug. 2016
Worldwide

The Productivity and Wellness Pal (PaWPal)*Undergraduate Researcher*

Jan. 2014–July 2015

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*Game Tester and Developer*

July–Aug. 2012

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, TensorFlow

Platforms

Android, iOS

ToolsGit, SVN, L^AT_EX, Unix

RELEVANT COURSEWORK**Graduate (completed):***Machine learning:* Advanced Intro. Machine Learning, Artificial Intelligence, Applied Data Analysis, Intermediate Statistics*Energy:* Engineering & Economics of Electric Energy Systems, Seminar in Electricity Market Restructuring, Seminar in Low-Carbon Electric Power*Policy:* Theory & Practice in Policy Analysis, Quantitative Methods for Policy Analysis, Microeconomics**Graduate (anticipated 2018-19):** Convex Optimization, Parallel Computer Architecture & Programming**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.***Global Clinic Team Member*

Sept. 2014–May 2015

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*Grader & Tutor*

Sept. 2014–May 2015

Claremont, CA, USA

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

Crowdy, Inc.*Lead Software Engineer*

Sept. 2013–Aug. 2014

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*Writing Center Consultant*

Sept. 2012–May 2015

Claremont, CA, USA

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

Google*Engineering Intern*

May–Aug. 2013

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
- Founded organization to partner Carnegie Mellon Ph.D. students with local organizations working towards social causes (e.g. Pittsburgh DataRescue).
 - Leading the Cybersecurity Clinics for Activists project.
- Engineers for a Sustainable World USA** July 2016–*Present*
New Chapter Development Coordinator USA
- As part of the national leadership team, developing new student and professional chapters across the country to strengthen the ESW network.
- Harvey Mudd Sustainability Committee** 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

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| DOE Computational Science Graduate Fellowship (National) | Sept. 2017– <i>Present</i> |
| 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 |