#### Juan Carlos Perdomo Silva

jcperdomo@g.harvard.edu| 787-510-3043 | jcperdomo.org

# Current **Employment**

Postdoctoral Fellow

2023-Present

Harvard Center for Research on Computation and Society

Host: Cynthia Dwork

#### Education

PhD - Electrical Engineering & Computer Science

2018-2023

University of California, Berkeley

Advisors: Peter Bartlett & Moritz Hardt

AB - Computer Science & Mathematics

2013-2017

Harvard College, magna cum laude with highest honors in field

### Honors & Awards

#### Academic

• National Science Foundation Graduate Research Fellowship

2018-2021

• UC Berkelev EECS Excellence Award

2018

• Detur Book Prize Winner, John Harvard Scholar

2014

#### International & Olympic Sailing

- Member of Emirates Team New Zealand's successful challenge for the 35th edition of the America's Cup in 2016
- Took semester leave from undergrad to campaign for the Rio 2016 Olympics
- Represented Puerto Rico at the 2015 Toronto Pan American Games
- 2013 Laser Radial ISAF Youth World Champion (1st ever from Puerto Rico)
- 2011 U-17 & U-21 Laser Radial World Champion
- North American, South American, & World Optimist Team Racing World Champion with Puerto Rico (2007 & 2008)

# **Teaching** Experience

Efficient Algorithms and Intractable Problems (UCB CS170)

Spring 2023

• Teaching assistant under Professors Prasad Raghavendra and John Wright.

#### Statistical Learning Theory (UCB CS281a)

Fall 2019

• Teaching assistant under Professors Moritz Hardt and Ben Recht.

Introduction to Theoretical Computer Science (Harvard CS121) Fall 2015-17

- Fall 2017, Head Teaching Fellow. Assisted Professor Boaz Barak in revamping the syllabus and managed a team of 15+ of course staff.
- Fall 2015 and 2016, Teaching Fellow. Assisted Professor Harry Lewis.

### Research **Publications**

Asterisks denote equal contribution, alphabetical ordering.

- Cynthia Dwork\*, Chris Hays\*, Nicole Immorlica\*, Juan C. Perdomo\*, and Pranay Tankala\*. "From Fairness to Infinity: Outcome Indistinguishable (Omni) Prediction in Evolving Graphs". under submission, 2024
- Joshua P. Gardner, Juan C. Perdomo, and Ludwig Schmidt. "Large Scale Transfer Learning for Tabular Data via Language Modeling". Advances in Neural Information Processing Systems, 2024

- Juan C. Perdomo, Tolani Britton, Moritz Hardt, and Rediet Abebe. "Difficult Lessons on Social Prediction from Wisconsin Public Schools". under review, 2024
- Gavin Brown\*, Jonathan Hayase\*, Sam Hopkins\*, Weihao Kong\*, Xiyang Liu\*, Seewong Oh\*, Juan C. Perdomo\*, and Adam Smith\*. "Insufficient Statistics Perturbation: Stable Estimators for Private Least Squares". Conference on Learning Theory, 2024
- Juan C. Perdomo. "The Relative Value of Prediction in Algorithmic Decision Making" International Conference on Machine Learning, 2024
- Michael P. Kim\* and Juan C. Perdomo\*. "Making Decisions under Outcome Performativity". Innovations in Theoretical Computer Science, 2023
- Juan C. Perdomo, Akshay Krishnamurthy, Peter Bartlett, and Sham Kakade.
  "A Complete Characterization of Linear Estimators for Offline Policy Evaluation". Journal of Machine Learning Research, 2023
- Jack Umenberger, Max Simchowitz, Juan C. Perdomo, Kaiqing Zhang, and Russ Tedrake. "Globally Convergent Policy Search for Output Estimation". Neural Information Processing Systems, 2022
- Juan C. Perdomo, Jack Umenberger, and Max Simchowitz. "Stabilizing Dynamical Systems via Policy Gradient Methods". Neural Information Processing Systems, 2021
- Juan C. Perdomo, Max Simchowitz, Alekh Agarwal, and Peter Bartlett. "Towards a Dimension-Free Understanding of Adaptive Linear Control". Conference on Learning Theory, 2021
- John Miller\*, Juan C. Perdomo\*, and Tijana Zrnic\*. "Outside the Echo Chamber: Optimizing the Performative Risk". International Conference on Machine Learning, 2021
- Celestine Mendler-Dunner\*, Juan C. Perdomo\*, Tijana Zrnic\*, and Moritz Hardt. "Stochastic Optimization for Performative Prediction". Neural Information Processing Systems, 2020
- Juan C. Perdomo\*, Tijana Zrnic\*, Celestine Mendler-Dunner, and Moritz Hardt. "Performative Prediction". International Conference on Machine Learning, 2020

#### Visitors Hosted

• Unai Fischer-Abaigar, visiting from LMU

Fall 2024

# Masters Thesis Supervised

• Peihan Liu, Harvard, Multicalibration and Loss Minimization

2023-2024

# Personal Information

- Born and raised in San Juan, Puerto Rico
- Fluent in English and Spanish