

Landon Butler

landonbutler.github.io ◇ landonb@berkeley.edu

RESEARCH INTERESTS	My research lies at the intersection of network science and machine learning, where I design mathematical and computational approaches to model, learn, and infer the dynamics of complex real-world systems. I have applied this work to a diverse set of domains including aviation, social systems, and robotics.	
EDUCATION	University of California, Berkeley Ph.D. candidate in Electrical Engineering and Computer Science <i>Advised by Prof. Kannan Ramchandran</i>	2027
	University of Pennsylvania M.S.E. in Data Science Thesis: Convolutional Learning on Multigraphs <i>Advised by Prof. Alejandro Ribeiro</i>	2022
	University of Pennsylvania B.S.E. in Systems Engineering Concentration: Artificial Intelligence and Data Science Minors: Computer Science, Mathematics	2022
AWARDS	Best Paper Award, <i>International Conference on Research in Air Transportation</i> Best Paper Award, <i>Andrew P. Sage Memorial Conference</i> Sidney Shore Award, <i>University of Pennsylvania</i> Norman Gross Engineering Prize, <i>University of Pennsylvania</i> Wolf Family Award in Systems Engineering, <i>University of Pennsylvania</i> Excellence in Student Support, <i>University of Pennsylvania</i>	2022 2022 2022 2022 2021 2021
FELLOWSHIPS	NSF Graduate Research Fellowship Littlejohn Fellowship, <i>University of Pennsylvania</i>	2022 2021
TEACHING	Teaching Assistant , <i>University of Pennsylvania ESE Department</i> <ul style="list-style-type: none">Statistics for Data Science, Spring 2021, Summer 2021Graph Neural Networks, Fall 2021Foundations of Data Science, Fall 2021	
INTERNSHIPS	Software Engineering Intern at Strivr, Summer 2020 <i>Developed encryption architecture for end-to-end protection of telemetry data</i> Electrical Engineering Intern at Kiewit, Summer 2016, 2017, 2018, 2019 <i>Designed plant circuitry across seven power generation projects</i>	
PUBLICATIONS	Preprints <ol style="list-style-type: none"><i>Convolutional Filtering and Neural Networks with Non-Commutative Algebras</i> arXiv:2108.09923, 2022 Alejandro Parada-Mayorga, Landon Butler, and Alejandro Ribeiro Conference Papers <ol style="list-style-type: none"><i>Equitable Optimization of U.S. Airline Route Networks</i> Andrew P. Sage Memorial Conference, 2022 Arnav Joshi, Andy Eskenazi, Landon Butler, and Megan Ryerson<i>Democratizing Aviation Emissions Estimation: Development of an Open-Source, Data-Driven Methodology</i> International Conference on Research in Air Transportation (ICRAT), 2022 Andy Eskenazi, Landon Butler, Arnav Joshi, and Megan Ryerson<i>Learning Connectivity for Data Distribution in Robot Teams</i> IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2021 Ekaterina Tolstaya, Landon Butler, Daniel Mox, James Paulos, Vijay Kumar, and Alejandro Ribeiro	