

Max Vilgalys

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Education	Massachusetts Institute of Technology	2017-
	PhD, Social and Engineering Systems Fields: Energy and environmental economics, industrial organization	
	Stanford University	2013-2017
	B.S. in Electrical Engineering	
Experience	Research Assistant for Nikhil Agarwal	2020-2021
	Research Assistant for Jing Li	2019-2020
	Research Assistant for Dava Newman	2018
	Data Analyst Intern, Western Interstate Energy Board, Denver, CO	2017
	Software Development Intern, Lichtblick Renewable Energy, Hamburg	2016
	Policy Intern, U.S. Department of Energy, Washington, D.C.	2016
Teaching	TA for IDS.032, Statistics, Computation and Applications, MIT	2021
	TA for 6.431X, Probability, MIT EdX	2020
	Tutor in Probability and Statistics, Stanford Office of Accessible Education	2016-2017
Fellowships and Awards	U.C. Berkeley/Sloan Summer School in Environmental and Energy Economics	2020
	Diversity Fellowship	
	MIT Exxon Mobil Energy Fellow	2019-2020
	MIT Presidential Fellow	2017-2018
	Twitter Award, Stanford CS Project Fair, "Fake News" detector	2017
Citizenship	U.S., Germany	
Languages	English (native), German (conversational)	
Coding	Python, MATLAB, Julia, Stata, C#/C/C++	
Research	Adaptation to Climate Change in U.S. Agriculture (with Jing Li, in progress) Between rising temperatures, shifting rainfall patterns, and higher risks of catastrophic weather, climate change is expected to bring lower, less predictable yields to farms worldwide. Perhaps the largest source of uncertainty in these estimates is farms' capacity to adapt to environmental change. We measure the extent of farms' adaptation by estimating average marginal effects of a nonparametric weather-only production function. In ongoing work, we construct a structural model of farm production, incorporating farms' adaptive measures.	
	The Changing Role of Coal-fired Generation in the Western Interconnection (with Maury Galbraith, Dian Grueneich, and Ben Lim) Electric system operators have provided anecdotal evidence that in the 21st century, coal-fired generation is transitioning from providing baseload power to meeting demand more flexibly. We support these claims with an analysis of coal plant generation schedules in the American West. Using a nonparametric clustering algorithm on hourly emissions data from the EPA, we demonstrate that baseload operation in coal plants in the Western Interconnection decreased from 52% of operating days in 2000 to only 22% of operating days in 2016, and that the number of coal plants that spent the majority of their operating days providing baseload power declined over 75% over the same period. Work completed at the Western Interstate Energy Board, 2017.	