

Stanford



Elizabeth Buechler

Ph.D. Student in Mechanical Engineering, admitted Spring 2018

Bio

BIO

Elizabeth (Lily) Buechler is a PhD candidate in mechanical engineering. She received her MS in mechanical engineering from Stanford in 2019 and her BS in mechanical engineering from Tufts University in 2017. She is broadly interested in the intersection of controls, optimization, and machine learning for energy and power systems. Her current research focuses on demand-side flexibility, residential electrification, and DER integration.

LINKS

- LinkedIn: <http://linkedin.com/in/elizabeth-buechler-445583101>
- Stanford Sustainable Systems Lab: <https://ramr.sites.stanford.edu/>
- Google Scholar: <https://scholar.google.com/citations?user=6lVsq5oAAAAJ&hl=en>
- Personal website: <https://ebuech.github.io/>

Publications

PUBLICATIONS

- **Improving the Load Flexibility of Stratified Electric Water Heaters: Design and Experimental Validation of MPC Strategies** *IEEE Transactions on Smart Grid*
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- **EV-EcoSim: A Grid-Aware Co-Simulation Platform for the Design and Optimization of Electric Vehicle Charging Infrastructure** *IEEE Transactions on Smart Grid*
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- **The Grid Under Extremes: Pandemic Impacts on California Electricity Consumption** *IEEE Power and Energy Magazine*
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- **Global Changes in Electricity Consumption During COVID-19.** *iScience*
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- **Data-Driven Load Modeling and Forecasting of Residential Appliances** *IEEE TRANSACTIONS ON SMART GRID*
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- **Probabilistic modeling of the indoor climates of residential buildings using EnergyPlus** *JOURNAL OF BUILDING PHYSICS*

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- **The value of demand response in Florida** *The Electricity Journal*

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