Stanford



Lama El Halabi

Ph.D. Student in Energy Science and Engineering, admitted Spring 2022

Bio

BIO

I am a PhD candidate in the Department of Energy Sciences and Engineering and a Data Science Scholar, advised by Adam Brandt. My research is driven by the crucial role renewable energy must play in sustainably meeting our energy demands. The major challenge in transitioning to renewable energy lies in the intermittent and inherently uncertain nature of these energy sources. My current research focuses on predicting energy outputs from these stochastically behaving sources, with an emphasis on uncertainty quantification and volatility. Specifically, I employ computer vision models and statistical techniques to develop short-term probabilistic photovoltaic (PV) power forecasts from sky images and time-series PV data. I hold an MS in Energy Resources Engineering from Stanford and a BE in Mechanical Engineering and a BS in Physics from the American University of Beirut. Previously, my research involved using machine learning to model water resources.