# Materials Science & Engineering and Metallurgical Engineering Graduate Seminar

Wednesday, January 30 2019, 4:10-5:00PM, FASB 295

## Kaai Kauwe

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University of Utah

## An introduction to materials informatics

Materials science is in the process of entering the data-driven era of science. In this talk, I highlight how big-data inspired techniques are being applied to the field of materials science and engineering. I also present the questions and obstacles that have made the field of materials informatics a distinct challenge for machine learning experts.



Kaai Kauwe is a Utah native who, before seeing the light, obtained a bachelors in Chemical Engineering at BYU. He is now a second year Ph.D. student in Materials Science and Engineering department. Kaai's research focuses on the application of machine learning techniques to materials data under the guidance of Dr. Taylor Sparks. Previous work includes a data-driven exploration of Li-ion systems, the prediction of solid inorganic heat capacity, exploration of breadth vs. accuracy when predicting crystal structure, and application of heterogeneous ensembling to improve band gap predictions. He is currently setting up and evaluating a data-driven framework for directly predicting Vickers hardness using a mix of computational and experimental data.