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**Data-Driven Techniques to Predict Formation Energy of Binary Materials**<sup>1</sup> JOHARI DRAMIGA, Texas Lutheran University, MATERIALS IN-TELLIGENCE: RHONE RESEARCH GROUP TEAM — In this project the goal was to develop a machine learning model to predict the thermodynamic stability of a material material given simple atom properties. Descriptors for the model were created using the Mendeleev package on data from the AFLOW materials database. The resulting model achieved approximately a .66 accuracy score using a Random Forest regression model.

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