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Peer Review: Brittany Hagler

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I am reviewing the poster presentation by Brittany Hagler on the project that she has been working on during her time here at Sandia National Laboratories. Brittany's poster is on her work developing a computational model to predict ignition times for various fuels inside engines. This is done using experimental data from the reaction rate of a fuel under certain conditions. She had very little experience with programming before her internship so this was a great opportunity for her to learn a lot.

The content of Brittany's poster is very good. The poster was done in a way that people who do not have a great background in chemistry or programming can understand it. It gives the reader a lot of information about her subject area without being technical to technical. It can be very difficult to explain technical problems in a way that is easy to understand for people who are not in the field and Brittany seems to have done a very good job at this. The poster also does a good job of explaining why she used certain mathematical models and methods when there were other options available. The poster is interesting and informative for its intended wide range of audiences.

Brittany's poster is very well organized. She has set up the poster to be read from top to bottom and then from left to right. She has also clearly labeled the names of each section as Abstract, Motivation, Method, Results, and Future Research. These clearly labeled titles made it really easy for the reader to understand the order in which the sections were to be read. The flow of the poster from section to section was also very good. The sections transitioned very well and made reading the poster very easy. The figures in the poster are also placed logically so the user will see the figure at the correct time.

The visual aids and organization of the poster are very effective. They draw people in to give the poster a closer look. The figures on the poster allow the reader to much more easily understand what the software is doing. The image of the gradients in particular allowed the reader to easily understand how using the gradient values would allow the program to find the result it is looking for. The image of the Newton method and Gradient decent method for computation gives the reader a good visual indication of why one method would be chosen over another. The title was sized well for people who were walking by to read. The rest of the text in the poster was very easy to read when standing a few feet away as people typically do when looking at posters. The design of the poster made it very easy for Brittany to point out different parts of the poster while she was explaining her poster to various people.