Overall Appreciation:

Fascinating project! The results are really interesting and say a lot about criticality in Ising models. The vast majority of my comments are just about adding more, since the model is so nice. More equations, more future work, more whatever. It’s really good stuff and I’m excited to see where it goes!

Abstract:

* Nice abstract! It is well-written and flows smoothly.
* I think traditionally, the abstract doesn’t actually count as a \section{}

Introduction:

* Maybe it would be worth mentioning why TE and AI are measures that are used. What is the motivation for using them?
* Also, maybe you should provide the equations for TE and AI (I haven’t done this yet either, but now I’m thinking it would be helpful for both of us).
* Last paragraph: Wow, great example! It is easy to understand these concepts with the opinion model It is nice how you introduced temperature in here, since it’s easy to visualize. Maybe you could do the same with energy, and some of the simpler variables you use in your model? This example is really great and works perfect with your introduction!

Model Description:

* I appreciate how you go from general network analysis to a more specific analysis. The network is very interesting!
* The first sentence would make sense in context with an equation.
* Is there an equation to calculate the critical temperature?
* Why does TE take so long? Maybe you could briefly mention it?
* Quick tip for LaTeX: use the tick marks `` for the beginning quotes and they will turn around the right way.
* Last sentence of first paragraph: Nice! This description was easy to follow! Is there a reason you picked 50K time steps? I think there’s some way of determining the optimal number of steps to discard to determine equilibrium distribution, but I don’t remember what it is.
* The very last sentence can be discarded if you provide the equation and its interpretation for TE and AI.

Results:

* Maybe show the exact equation for energy?
* Results for Figures 1 and 2: Very nice!
* Yeah, these results are really interesting. Great results. Good job summarizing too.

Discussion:

* Awesome! I’m excited to see what you’re going to do next! Are you going to try different networks? Are you going to study perturbations in any way? You should include more because it’s really cool!

Great job!

~ Alyssa Adams