Overall appreciation:

Great paper and project! You outlined the problem very well and justified your model in a way that was consistent with previous studies. I never felt lost when reading this, which is an indication of good writing. The only thing I would mention is to elaborate a bit more on the background material. But I see that you have a placeholder for this, so you’re on the right track already! The results are really cool. It’s fascinating how the Gov node has the lowest AI because it’s not an obvious result. Great job and great model!

Abstract:

Really good abstract. It reads very well and is general enough without losing the important details of the paper. Great job!

Second to last sentence: That’s a really interesting result! This makes reader anxious to see how this conclusion is reached.

Introduction:

* Good job introducing the goals and ideas of the project! Damage propagation is extremely interesting, especially from an economic perspective.
* Sentences 4, 5, 6 can probably be turned into a single sentence.

The second paragraph is a fantastic illustration of how damage can be most severe if it is from indirect losses.

First sentence of last paragraph can probably be reworded to read easier.

Second to last sentence: Maybe it would be worth adding these equations, and briefly explaining how they work. If they aren’t too complicated and crazy.

The Model:

You probably don’t need the first two sentences.

Is Gov a node? “Force” sounds like a Boolean update rule. It isn’t too clear in this paragraph.

Try representing all rules as a list. I think most papers with Boolean rules do this, because it is easy to read.

Have you read about insurance disaster models? This is what this reminds me of! Many people have looked into insurance models and how simulating disaster can cause insurance companies to fail or not. It’s really cool, I think you would like it.

<https://scholar.google.com.mx/scholar?q=insurance+disaster+model&hl=en&as_sdt=0&as_vis=1&oi=scholart&sa=X&ved=0ahUKEwikgJ7Mt7LMAhVPwWMKHR7kAm0QgQMIGTAA> One question they try to answer is how big of a disaster needs to occur for an insurance agency to fail, how frequent those disasters occur, and how much an insurance agency should charge.

It might be worth making a new section for previous/other models. This will further distinguish your model from other models.

Results:

Fascinating results! The plots are very nice. I wonder if you could make a plot that shows the relation between “being hit directly by a disaster”, “being hit indirectly by a disaster”, and TE or AI. Like, what happens to information in nodes that get hit with disasters a lot?

Maybe provide equations for TE and AI? (I didn’t do it either, but maybe we should have them in our papers…)

Great job!

~ Alyssa Adams