

Here are the key things I think your write up needs to talk about from the point of view of "what are the theoretical limits of computation?"

DON'T start with the hardware, start with the math.

I think the style/formula should be something like

1. here is a mathematical model for computing
2. the fundamental "actions" in this realm are???
3. here are its benefits and limits of this approach
4. here are (potentially) various devices that might natively compute this model, if any (or why they might not exist)

Examples

1. Turing machines, they describe a class of functions over discrete sets, can be implemented with binary logic using transistors, vacuum tubes, etc
2. Computing over the reals?, etc etc

The list of fundamental mathematical ideas really might just be those in the first column of this slide.

Point is: you shouldn't worry about the reservoirs, or DNA or etc... but work from the math backwards and maybe connect that with one or more of the various techniques that might be capable of computing based on that mathematical model.