Review of Evolutionary Design of Digital Circuits Using Genetic Programming.pdf

- Is it an interesting paper? Here you want to address whether the paper has good results. Are the results insightful or could you have easily guesses the outcome?
  - The paper's results are good. They clearly show graph representations are much more efficient than mutating bitstreams directly. The difference in the number of generations needed to evolve comparable circuits between EHW and this paper is monumental.
- Is the paper well written? Here you want to address whether the writing was such that you just couldn't put down the paper or whether it was a real struggle to read it. Are the sentences long and windy or were they short and crisp?
  - This paper's grammar was not good; it flipped between singular and plural nouns and adjectives mid-sentence and completely dropped pronouns multiple times. Ex: "The initial population of trial computer is randomly generated." The content of the paper itself was interesting and pertinent to my research.
- Who might be interested in reading the paper? In your opinion, is the paper so narrow or so technical that only a few experts would appreciate it? Is the paper so fluffy that nobody is interested in it? Does it address questions or present results that are of interest to a wide audience in a sub-field of AI, or even more than one subfield in AI?
  - This is a solid base on using CGP to evolve circuits. It is a comprehensive introduction to the knowledge needed to do your own research but will likely bore anyone who is actively doing research in this field.
- Based on your own literature search, does the paper cite relevant prior work?
  - This is one of the earliest CGP papers for circuits and is cited by many other papers. The papers it cites are credible and come from credible journals like IEEE.
- Is the paper sound? Do portions of the paper contradict each other? Does it do a good job explaining how they build on existing work? Do the results make sense? Are they overselling their accomplishments?
  - The paper is sound. Sections do not contradict each other. The paper explains that it builds on the CGP work in analog electronics and applies it to digital circuits. The results are surprisingly strong, especially compared to EHW. As long as the numbers stated in the tables are accurate, I feel they are adequately representing their accomplishment in the field.