

Evolutionary Learning In Grouped Gene Networks

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1 Introduction 1.5PM

Introduction: You need not spend more than 1.5 pages describing the original paper.

- The displayed genes of a creature, their phenotype, is not only influenced by their own genetic code, know as their genotype, but also through complex interactions between the genes of that creature.
- This means that each trait displayed by a creature is actually the result of the entire genotype, and not just a single locus in the genetic code.

2 Experiment Setup

- What you evolved including:
 - How you represented individuals
 - What fitness function did you define
 - What kind of GA you used
 - Steady state/ generational? Tournament selection/ fitness proportionate (roulette wheel)?
 - What kind of crossover (if any) you used.
 - All parameters (enough detail so a reader could re-implement the GA)

3 Reimplemented Results

- 1 Page
- The reimplemented figures (side by side with the originals)
- Discussion of what the results show/don't show, what worked/didn't work, what you learned

4 Extension

- 1 Page
- What is your research question/hypothesis?
 - e.g., 'compare x with y' or 'add x and see what difference it makes compared to not(x)'.
- Describe methods / any advancements
- Support the value of asking that question (using literature)
- What do you expect to happen (what might happen)?
- Why do you think that?

5 Extension Results

- 1.5 page

6 Conclusion

- one page
- What do you conclude from that
- significance of the extension results
- critique/evaluation

7 Appendix