# **CS 472 — Project 3**

## GAs & DEs — A Land of Lisp Approach

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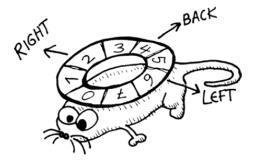


Figure 1: Gene "wheel" depicting directions of rat travel.

## 1. ABSTRACT

Test drive abstract. More to come. Need to list all subsequent sections along with a brief summary.

## 2. INTRODUCTION

Land of lisp did rats. I do rats with de & ga.

### 3. MODELS

Description of Land of Lisp rat model here.

## 4. ALGORITHMS

Compare and constrast DE with GA. Some pseudo-code.

## 4.1 Genetic Algorithms

GA specific alg info here.

#### **4.2** Differential Evolution

 $\ensuremath{\mathsf{DE}}$  specific alg info here. Only using DEMO/parent at this point.

## 4.3 Comparison

Compare & contrast GA with DE.

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## 5. EXPECTATIONS

List of research questions (RQ1, RQ2, etc) and/or hypotheses (H1, H2, etc). Must include two-population hypothesis.

#### 6. RESULTS

Performance, effectiveness, better on one or multiple objectives. Graphs, etc.

#### 7. VALIDITY

Comment on limitations of study.

#### 8. CONCLUSION

Return to section *Expectations* and address whether the results match what was expected.

#### 9. FURTHER WORK

Discuss paths not taken. What would be next step?

## 10. REFERENCES

Self-explanatory.

## 11. LISTINGS

All source code and example output. Divide code into three files — de.lisp, ga.lisp, and gade.lisp.