# **Assignment Title**

#### Name & student no.

## 1 INTRODUCTION

Concise description of task asked and your approach(es).

#### 2 BACKGROUND RESEARCH

Use clear referencing and avoid including material directly unless carefully indicated as from another source. Half to a whole page expected.

#### **3 EXPERIMENTATION**

Describe your basic algorithm so anyone who knows about basic GAs could hopefully repeat what you have done. Describe the binary representation, the parameters, the fitness calculation, etc.

Present your results as averaged behaviour over more than one run, eg (graph not of assignment):

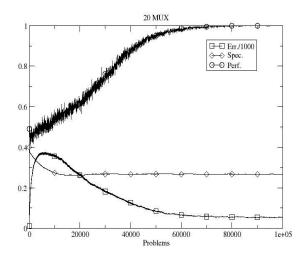


Figure Example: Initial performance.

Show the effects of varying parameters and give potential explanations as to why the behaviour/performance changes. Eg vary the

mutation rate or population size.

Clearly describe how you changed the representation to deal with real-valued problems. And then present results from its use, with graphs and explanations.

Depending on how much work you managed after the first three worksheets, results from them can be greatly reduced if you went much further.

For the very keen, it would be great to see comparative performance on either benchmark optimisation problems or the UCI/wel-known datasets. You don't need to implement other algorithms, use of Weka, etc. is fine.

# **4 CONCLUSIONS**

Concise summary of what you found and learned. Identification of ways you might do things differently next time, and why.

### **REFERENCES**

Author, A. (1970) The best way to do AI ever. *IEEE Transactions on Data Mining* 1(1): 209-238.

## Source code as an appendix