Attribute Learning System

[Applying Genetic Algorithms to Improve RPG Combat Mechanics]

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ABSTRACT

Blah blah blah abstract goes here.

Categories and Subject Descriptors

1.2.1 [**ARTIFICIAL INTELLIGENCE**]: Applications and Expert Systems — *games*

General Terms

Genetic Programming

Keywords

Genetic, Programming, Game, Development

1. PROBLEM
2. APPROACH
2.1 Prior Work
2.2 Target Audience
3. IMPLEMENTATION
3.1 Genetic Algorithm
3.2 Fitness Function
3.3 Simulation
3.4 Function Tree
3.4.1 Mutation Algorithm
3.4.2 Cross-over Algorithm
3.5 Function Vector
3.5.1 Mutation Algorithm
3.5.2 Cross-over Algorithm

Tried several approaches:

- Move usage**
- Battle victory**
- Battle length
- Linearity

3.6 Players
3.6.1 Minimax Player
3.6.2 Greedy Player
3.6.3 Random Player
3.6.4 Utility calculation
4. VALIDATION
4.1 Function Tree
4.1.1 Levenshtein Edit Distance

Mutation

Cross-over

4.1.2 Numerical Analysis

Mutation

Cross-over

5. RESULTS
5.1 Parameters
6. CONCLUSION
7. FUTURE WORK
7.1 Genetic Operators
8. REFERENCES
9. REFERENCES