### ROYAL HOLLOWAY, UNIVERSITY OF LONDON

#### FULL UNIT PROJECT

FINAL PROJECT REPORT

# Cooperative Strategies in Multi-Agent Systems

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#### Abstract

Hello this is my abstract

https://users.ece.cmu.edu/koopman/essays/abstract.html

### Introduction

#### How to structure:

- Intoduction and review on past work on indirect reciprocity and the evolution of cooperation
- Methods:
  - My model of reciprocity, it's variables etc.
  - System design (Prolog + environ)
  - Interesting programming techniques
  - Software engineering techniques, tools and processes
- Results
  - Analysis and evaluation of the results produced by my model
- Discussion and Conclusion
  - Impacts in real life and intelligent agents
  - Limitations of the system and how this could be improved
  - Issues in the development process and how these could have been avoided/accounted for
- Professional issues

### **Review of Literature**

Evol Coop [1] Milestone: The report should describe the theory behind indirect reciprocity and its strategies in relation to game-theory Milestone: The report should describe the link between indirect reciprocity theory and real life biological and intelligent agent interactions

### Contents and Knowledge

Methods Milestone: The report should describe the onlookers and gossip aspects of indirect reciprocity

Milestone: The report should contain a design of the web application and environment, Prolog service and agents, and the connection between them Milestone: The report should provide an analysis and evaluation of strategies in indirect reciprocity tournaments

Milestone: The report should contain a discussion of the software engineering techniques, tools and processes used and issues encountered

Milestone: The report should contain any interesting programming techniques employed to develop the final prototype

### Discussion and conclusions

Discussion

## **Bibliography**

[1] Robert Axelrod and William D. Hamilton. The evolution of cooperation. *Science*, 211:1390–1396, 1981.

### **Professional Issues**

Professional Issues