Intelligent Systems



Rule Based Systems

[30077548@students.southwales.ac.uk](mailto:30077548@students.southwales.ac.uk?subject=Rule%20Based%20Systems%20Report)

Sebastian Ha

30077548

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# Introduction

Expert Systems are computer programs that use artificial intelligence to mimic decision making and problem-solving abilities of human experts in a certain field or topic to answer a presented problem domain.

Expert systems are computer programs that utilise knowledge and inference mechanisms to provide advice, solutions or recommendations in specialised domains. They are designed to capture and emulate the expertise of human specialists to solve complex problems and make informed decisions.

<https://www.youtube.com/watch?v=O-FZ4Q8RXds>

The problem domain I was assigned was the Wait for Table decision problem. This covers the everyday decision of a restaurant customer of choosing whether they should wait for a table by considering many factors such as how busy the restaurant is, waiting times for a table, whether there is another restaurant they can go to and other types of factors that can affect their resulting decision. For this problem I was allocated a decision tree to work off to help create the expert system.

The purpose of expert systems in this assignment is to encode the decision process behind the wait for table decision tree. By having rules applied to the facts provided by the customer the system will be able to advise whether a customer should wait for a table. Further to this, expert systems are designed to capture specialist knowledge and apply it systematically to individual cases, supporting decision making in a transparent way.

# Evaluation of the System

# AI Context

# Knowledge acquisition and Learning

# Conclusion

# Appendices