

ECS7016P Interactive Agents and Procedural Generation

Coursework: Industry Case Study

Deadline: 11am Friday 22nd March 2024

Weight: 40% module

This is an individual written coursework that requires you to submit a case study report of 2000 to 3000 words.

Case Study Topic Selection

Your topic will relate to the AI systems of a game, or a pair of games, i.e. the interactive agents and/or procedural content generators developed as part of the game(s). The aim of the case study is to gain a better understanding of how AI systems are used in industry by studying a particular example in depth.

A list of case study topics will be published on QMPlus. Topics can initially be selected via a “select a case study topic” activity on QMPlus. Topic selection opens 5pm January 31st.

- Each topic will be restricted to a limited number of students.
- Topic selection will be allocated on a **first-come first-serve** basis.
- Students who do not select a topic will be allocated one.
- A full list of topic allocations will then be published, based on those selections.

The module organiser has final say on allocated topics. Submitting a report on a topic that you were not allocated **will receive a ZERO mark**.

Case Study Content and Format

The case study should be based on appropriate sources, e.g. papers, blog posts or videos that describe the AI systems, and referenced appropriately. You use the following section structure.

Introduction

- Introduce the game(s) and the specific AI system(s) the case study discusses.

The Game

- Describe the role of the AI systems within the game or games' overall design.
- What requirements did this design place on these AI system(s)?
- Mention any specific constraints or challenges (hardware, development, etc).

System Design

- Explain the technical details of how the AI system(s) are designed and operate in this game. Focus in particular on aspects which are specific to this game.
- Provide specific examples/scenarios to illustrate their operation.

Case Study Content and Format (continued)

Industry Context

- Compare these AI systems to standard approaches used in the games industry, and approaches used in comparable games.

Conclusions

- Summarise the key points of your case study.
- Reflect on the overall success or failure of the AI system(s) in this game or games.
 - Do you think they satisfy the overall goals the designers had? Why or why not?
 - How do they compare with other games?
 - What do you think could be improved upon?

References

- A list of references used i (those provided in the topic description and any others used)
- These should follow a recognised format
(<https://qmplus.qmul.ac.uk/mod/book/view.php?id=653429&chapterid=66172>
ps this link is to a QMUL book on literacy skills that may be useful!)

Marking criteria

- Diagrams are not included in the word limit.
- Reports over the word limit will be assessed on the first 3000 words only.
- The case study (marked out of 100) will be assessed on:
 - Technical description (40 marks)
 - Placement/context of AI within the game design (15 marks)
 - Context of AI within Industry (15 marks)
 - Reflection (10 marks)
 - Overall Presentation (Clarity, language, layout, overall coherence) (15 marks)
 - Quality of references (5 marks)

Pre-submission checks

Did you check which topic you were allocated?

Have you appropriately referenced your sources?

Have you described the AI systems in your own words, and not plagiarised the sources?

Hint: You can upload your submission to QMPlus on the submission page before the deadline and it will generate a plagiarism report for you to double check you haven't inadvertently plagiarised. Pay attention to the matched content rather than the percentage similarity. For example, the text in the references section will often match but this is fine.

Is the case study between 2000 and 3000 words.

Everything ready? **Don't forget to hit submit.**