

Amended timescale for PhD

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April 5, 2019

1 Work Plan

This section will present my amended work plan for the next year (ending Spring 2020).

1.1 Phase 1: Design of AI algorithm variants:

The first phase would design an AI search algorithm with sequential and parallel variants, measure and compare the speed up achieved between them, then tuning algorithms to see if this speed up can be improved.

1.2 Phase 2: Fitting AI into a larger game scenario:

The second phase would look to embed the above algorithm in larger logic game, and perform an experiment to observe how it performs with complexer decisions to make.

1.3 Phase 3: Does the responsiveness and quality of AI improve the degree of player engagement?:

The third phase will look to conduct experiment would assess degree of user gained through quality and responsiveness of the AI algorithm, and, wherever parallelism elevates this.

1.4 Phase 4: Write-up:

The final stage will be to write up and sum the whole research, and aim to prove a correlation between the quality and responsiveness of AI algorithm, and, a player's view of increased engagement in the gameplay.

A full work plan for the next year is presented in the table below.

TASK	DEADLINE
Phase 1: Sequential implementation of MiniMax in C Sharp.	now
Phase 1: Parallel variants of above Minimax C Sharp implementation using TPL.	end-April 2019
Phase 1: Performance tuning of implementation variants.	end-May 2019.
Phase 1: MILESTONE 1 REACHED	end-May 2019
Phase 2: Integrate Minimax variants into sample full game scenario.	end-June 2019
Phase 2: Modelling RPG Game scenario for Minimax implementation to fit in.	end-July 2019
Phase 2: MILESTONE 2 REACHED	end-July 2019
Phase 3: Design experiment for engagement	end-Aug 2019
Phase 3: Conduct experiment	end-Sept 2019.
Phase 3: Evaluate results gained from the experiment	end-Oct 2019.
Phase 3: MILESTONE 3 REACHED	end-Oct 2019
Phase 4: Write and submit the PhD thesis	Spring 2020?
Phase 4: MILESTONE 4 REACHED	Spring 2020?

Table 1: Work plan for remaining time period.

The following citation referring to the template used to create this document. [1].

References

- [1] J. Y. Gil. $\text{\LaTeX} 2_{\epsilon}$ for graduate students. manuscript, Haifa, Israel, 2002.