

# Project Schedule

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		Visual Task	Imitation Learning Task
Mar	1 - 31 (4 weeks)	Read papers: About self-supervised learning	(1)Read papers: About Imitation learning (2)Test OpenAI Atari platform
April	1 - 30 (4 weeks)		(1)Read papers: About inverse Reinforcement learning (2)Edited Gym library to get actions, rewards and state images
May	1 - 31 (5 weeks)	(1)Read paper: Grad-CAM (2)Tried images with the Grad-CAM (3)Searched the object detection methods: RCNN	<b>GAIL</b> (1) Initialised the GAIL method
			<b>DQN (Plan B, if GAIL failed)</b> (1) Searched the DQN method
June	1 - 21 (3 weeks)	(Exam period, no tasks)	
June	21 - 7 (2 weeks)	<b>Object Detection</b> (1)Detect multiple roles on the video sequences. (2)Get useful info from object tracking (3) Document methods (4) Document paper reading note	<b>GAIL</b> (1) Use colour to get the players' position (2) Use the positions as the embedding for GAIL (3) Test and debug GAIL
July			<b>DQN</b> (1) Use colour to get the players' position (2) Initialised the DQN method (3) Use the positions as the embedding for DQN (4) Test and debug DQN
July	8 - 21 (2 weeks)	<b>OCR</b> (1)Recognise score by OCR approach (2) Document methods (3) Document paper reading note	<b>GAIL</b> (1) Try the <b>OD</b> info as state info (2) Optimise GAIL (3) Play and debug GAIL (4) Document methods (5) Document paper reading note
			<b>DQN</b> (1) Try the <b>OD</b> info as state info (2) Optimise DQN (3) Play and debug game (4) Document methods (5) Document paper reading note
July	22 - 4 (2 weeks)	<b>Action Detection</b> (1)Identify actions (2) Document methods (3) Document paper reading note	<b>GAIL</b> (1) Train with <b>OCR</b> and debug (2) Document methods (3) Document paper reading note
Aug			<b>DQN</b> (1) Train with <b>OCR</b> and debug (2) Document methods (3) Document paper reading note

Aug	5-18 (2 weeks)	<b>Debug</b> (1) Debug object, OCR, action detections (2) Document methods (3) Document paper reading note	<b>GAIL</b> (1) Train with <b>detected action</b> and debug (2) Document methods (3) Document paper reading note  <b>DQN</b> (1) Train with <b>detected action</b> and debug (2) Document methods (3) Document paper reading note
Aug Sep	19 - 8 (3 weeks)	<b>Debug</b> (1) Debug <b>object</b> , <b>OCR</b> , <b>action</b> detections (2) Update methods (3) Update paper reading note	<b>Debug &amp; Refine</b> (1) Refine and debug product (2) Make an easily reusable product (3) Prepare Introduction
Sep	9 - 30 (3 weeks)	<b>Refine &amp; Report</b> (1) Make an easily reusable product (2) Write 1st "Introduction" & "Method" 1st draft	
Oct	1-31 (4 weeks)	<b>Report</b> (1) Update "Introduction" & "Method" part (2) Finish other parts of report (3) Prepare product, report, final presentation (4) Submit report	