

# Simple Single Page Abstract template

Mark Trovinger<sup>1</sup>, Perusha Moodey<sup>2</sup>

<sup>1</sup>) Purdue Fort Wayne  
trovmr01@pfw.edu

<sup>2</sup>) University of Reading  
perusha.moodley@pgr.reading.ac.uk

In reinforcement learning, one of the major issues is known as the credit assignment problem. This problem makes it difficult to determine which action is responsible for a given reward. Decision transformers applied the transformer architecture to the reinforcement problem domain, and while the credit assignment problem is examined, it was not done in detail. This work examines how well the decision transformer performs in an environment with a much longer context length. We used the VizDoom environment, and implemented data collection necessary for training a transformer in a variety of different scenarios.