

北京邮电大学 本科毕业设计（论文）任务书

Project Specification Form

Part 1 - Supervisor

论文题目 Project Title	A Study on Story Model Architectures for RPGs Using Large Language Models		
题目分类 Scope	Research	Data Science and Artificial Intelligence	Simulation
主要内容 Project description	<p>This undergraduate thesis project focuses on developing and analyzing story models for role-playing games (RPGs) using large language models (LLMs), such as the GPT series. RPGs are interactive games that heavily depend on compelling narratives to engage players and drive gameplay. Traditionally, game stories are manually scripted, which limits their flexibility and adaptability to player choices. With recent advances in natural language processing, LLMs have shown strong capabilities in generating coherent and contextually relevant text, opening new possibilities for dynamic and personalized storytelling in games. The primary aim of this project is to design and implement a prototype story model that utilizes an LLM to generate adaptive RPG narratives in response to player input. The project will involve reviewing existing narrative generation techniques and RPG storytelling frameworks, followed by integrating an LLM via APIs or open-source models as the core narrative engine. Methods include prompt engineering to guide the model's outputs, managing story coherence over multiple turns, and incorporating player choices into the narrative flow. The evaluation will focus on assessing story quality, coherence, and player engagement through qualitative user testing. Tools may include Python programming, LLM APIs (such as OpenAI's GPT), and simple user interfaces for interaction. This project provides students with practical experience in AI-driven interactive storytelling, game design, and natural language generation.</p>		
关键词 Keywords	Large Language Models (LLMs), Role-Playing Games (RPGs), Player-driven Narratives		
主要任务 Main tasks	1 Conduct a literature review on narrative generation and RPG storytelling frameworks.		
	2 Design and implement a prototype story model using a large language model for dynamic narrative generation.		
	3 Develop prompt engineering strategies to maintain story coherence and incorporate player choices.		
	4 Evaluate the system through qualitative user testing focusing on story quality and player engagement.		
主要成果 Measurable outcomes	1 A functional prototype demonstrating adaptive RPG storytelling powered by large language models.		
	2 An analysis detailing the effectiveness and limitations of LLM-generated narratives in RPGs.		
	3 Recommendations for future improvements and applications of AI-driven interactive storytelling in game design.		

