LEARNING EXPERIENCE ITINERARY

Title: Reinforcement Learning with LLMs Interactive Learning Experience

Date: 16 July 2025   Start time: 0900   End time: 1400

Location: Classroom 2

As Large Language Models (LLMs) continue to grow in capability and use, understanding how to fine-tune and optimize their performance is increasingly valuable. In this hands-on learning experience, we'll explore how Reinforcement Learning (RL) techniques can improve the output and behavior of LLM-based applications. This session will focus on practical strategies for optimizing LLMs for project-specific use cases. While RL will be the primary lens, we'll also touch on complementary methods and packages that support broader LLM development goals. Topics include core concepts such as Multi-Armed Bandits, Reward Modeling, Reinforcement Learning from Human Feedback (RLHF), and model finetuning. By the end of the workshop, attendees will gain a working knowledge of how RL integrates with LLMs and how these methods apply to real-world projects.

TIME	EVENTS DESCRIPTION	DURATION (MINS)
0900	Kickoff and Package Installations	20
0920	Overview of LLMs& LLMs as Agents and Tools	25
0945	Code Base Setup and Overview	10
0955	Break	5
1000	Bandit Algorithms	15
1015	Bandit Code Review	15
1030	LLM Output Optimization via Reward Modeling	15

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TIME	DESCRIPTION	DURATION (MINS)
1045	Reinforcement Learning from Human Feedback Code Review	15
1100	Lunch	60
1200	LLM Configurations	15
1215	LLM Configurations Code Review	15
1230	Additional RL Rools & RL Loops for LLMs	30
1300	Code Review for Reinforcement Learning Loops	15
1315	Capstone Project	45

To attend this event, please be sure to register with the link below:

RSVP Form: https://forms.osi.apps.mil/r/MNgCJe9HWH

For additional information, be sure to reach out to:
- Joshua Q. Church, Joshua.Q.Church@erdc.dren.mil
- Tyler J. Jackson, Tyler.J.Jackson@erdc.dren.mil