



2026 DareFightingICE LLM AI Competition

Team 4
Kim Byeolha

Aug 6th, 2026

College of Information Science and Engineering (ISSE)
Ritsumeikan University

Outline

- **Zoning AI**
 - Zoning AI Outline
 - System Architecture
- **Rushdown AI**
 - Rushdown AI Outline
 - System Architecture



Zoning AI Outline

- Our LLM agent is based on Meta Llama 3.2 3B Instruct and fine-tuned with LoRA / QLoRA for NEZ zoning-style gameplay.
- Reason for Choosing This Model:
 - It is lightweight, efficient, and suitable for local deployment.
 - It also has strong instruction-following ability and works well with LoRA / QLoRA fine-tuning.
 - This makes it a good balance between performance and computational cost for repeated FightingICE experiments.
- The model was trained using a precompiled mixed dataset based on Simonkami/MctsAi_Zoning and Simonkami/fireball2.



Zoning AI Outline

- The goal of fine-tuning was to improve zoning decisions, projectile usage, spacing control, and safe fireball timing.
- The agent uses a hybrid decision system that combines a fine-tuned LLM, prompt engineering, and a rule-based safety policy.
- During gameplay, the LLM mainly handles safe zoning decisions, while the rule-based logic manages emergency defense, spacing recovery, projectile safety, and corner escape.



System Architecture

- The agent receives the current game state from FightingICE and converts it into a prompt through the prompt generator.
- The fine-tuned LLM predicts an action based on the current game state.
- The safety policy checks whether the selected action is safe and appropriate for zoning gameplay.
- If the LLM action is unsafe, the rule-based policy corrects it before sending the final action to FightingICE.



Rushdown AI Outline

- Our Rushdown AI is a GARNET-based LLM agent fine-tuned from Meta Llama 3.2 3B Instruct using LoRA / QLoRA.
- The main objective is to stay close to the opponent, apply constant pressure, and win exchanges through fast attacks, throws, and ground special moves.
- The fine-tuning dataset was built from real BlackMamba vs MctsAi23i battle logs, using only useful gameplay history rather than placeholder data.
- The model was trained to choose one valid FightingICE action from the current game state and recent action history.



Rushdown AI Outline

- The agent combines fine-tuned LLM decision making with prompt engineering, candidate action filtering, and safety fallback logic.
- The prompt does not fully control the AI; instead, it helps the trained LLM understand the current distance, risk level, corner status, HP/energy situation, and opponent action.
- The final goal is to make the LLM act as the main decision maker while rule-based logic only corrects unsafe or invalid actions.



System Architecture

- The agent receives FightingICE FrameData and converts it into a simple game-state summary.
- The summary includes distance, HP, energy, corner status, risk level, and opponent action.
- Candidate rushdown actions are generated from the current situation.
- The fine-tuned LLM chooses one valid action from the candidates.
- If the output is invalid or unsafe, the fallback logic corrects it.
- The final action is executed through the FightingICE CommandCenter.
- Gameplay decisions are saved as logs for later analysis.