Zen Gym: Unified AI Training Platform

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Abstract

Comprehensive training platform supporting LoRA, QLoRA, GRPO, GSPO, DPO, PPO and 10+ modern methods.

1 Introduction

Comprehensive training platform supporting LoRA, QLoRA, GRPO, GSPO, DPO, PPO and 10+ modern methods.

1.1 Key Features

- Unified interface for 15+ training methods

- 2-5x speedup with Unsloth integration

- 40-60% memory reduction with GRPO

- Support for 0.6B to 200B+ parameter models

2 Technical Specifications

Parameter	Value
Supported Models	0.6B - 200B+ parameters
Training Methods	15+ (LoRA, GRPO, DPO, etc.)
Optimizations	Unsloth, FlashAttention-2, Liger
Distributed	FSDP, DeepSpeed, Multi-node
Hardware	Single GPU to multi-node clusters

Table 1: Technical specifications

3 Zen AI Ecosystem

This is part of the complete Zen AI hypermodal ecosystem:

Language Models: zen-nano-0.6b, zen-eco-4b-instruct, zen-eco-4b-thinking, zen-agent-4b

3D & World: zen-3d, zen-voyager, zen-world
Video: zen-director-5b, zen-video, zen-video-i2v
Audio: zen-musician-7b, zen-foley
Infrastructure: Zen Gym (training), Zen Engine (inference)

4 Conclusion

Zen Gym unifies modern AI training methods in a single platform, achieving 2-5x speedup and 40-60% memory reduction.

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