DSP 超参数

CustomTrainingArguments(
_n_gpu=1,
adafactor=False,
adam_beta1=0.9,
adam_beta2=0.999,
adam_epsilon=1e-08,
auto_find_batch_size=False,
batch_size=256,
bf16=False,
bf16_full_eval=False,
cache_dir=None,
contrast_loss_coeff=0.0,
data_dir=path/to/cleaned_data,
data_path=yahma/alpaca-cleaned,
data_prefix=yahma/alpaca-cleaned,
data_seed=None,
dataloader_drop_last=False,
dataloader_num_workers=0,
dataloader_pin_memory=True,
ddp_bucket_cap_mb=None,
ddp_find_unused_parameters=None,
ddp_timeout=1800,
debug=[],
debug_mode=False,
deepspeed=configs/default_offload_opt_param.json,

disable_tqdm=False,
do_eval=True,
do_predict=False,
do_train=True,
eval_accumulation_steps=None,
eval_at_start=True,
eval_data_path=['data/age_bias_contain_score_test.json'],
eval_delay=0,
eval_steps=10,
evaluation_strategy=steps,
fp16=True,
fp16_backend=auto,
fp16_full_eval=False,
fp16_opt_level=O1,
fsdp=[],
fsdp_config={'fsdp_min_num_params': 0, 'xla': False, 'xla_fsdp_grad_ckpt': False},
fsdp_min_num_params=0,
fsdp_transformer_layer_cls_to_wrap=None,
full_determinism=False,
gradient_accumulation_steps=8,
gradient_checkpointing=False,
greater_is_better=None,
group_by_length=False,
half_precision_backend=auto,
hub_model_id=None,
hub_private_repo=False,
hub_strategy=every_save,
hub_token=<HUB_TOKEN>,
ignore_data_skip=False,
include_inputs_for_metrics=False,
jit_mode_eval=False,
label_names=None,
label_smoothing_factor=0.0,
learning_rate=1e-06,
length_column_name=length,
lm_loss_coeff=0.5,
lm_score_thresh=0.85,
load_best_model_at_end=False,
local_rank=0,

log_level=passive,
log_level_replica=warning,
log_on_each_node=True,
logging_dir=/home/student2020/srcao/Domina Specific Preference/age_unbiased_checkpoint/runs/Feb27_17-45-49_ubuntu,
logging_first_step=False,
logging_nan_inf_filter=True,
logging_steps=1,
logging_strategy=steps,
lora_alpha=16,
lora_dropout=0.05,
lora_r=8,
lora_target_modules=['q_proj', 'v_proj'],
lr_scheduler_type=linear,
max_grad_norm=1.0,
max_length=512,
max_response_num=1,
max_steps=-1,
metric_for_best_model=None,
micro_batch_size=32,
model_name_or_path=/home/student2020/srcao/meta-llama/Llama-2-7b-hf,
model_type=llama,
mp_parameters=,
no_cuda=False,
num_train_epochs=1.0,
optim=adamw_torch,
optim_args=None,
output_dir=/home/student2020/srcao/Domina Specific Preference/age_unbiased_checkpoint/,
overwrite_output_dir=False,
padding_side=left,
past_index=-1,
per_device_eval_batch_size=1,
per_device_train_batch_size=1,
pooling_type=last,
prediction_loss_only=False,
push_to_hub=False,
push_to_hub_model_id=None,
push_to_hub_organization=None,

push_to_hub_token=<PUSH_TO_HUB_TOKEN>,
ray_scope=last,
remove_unused_columns=False,
report_to=['tensorboard', 'wandb'],
resume_from_checkpoint=None,
reward_domain=general,
run_name=/home/student2020/srcao/Domina Specific Preference/age_unbiased_checkpoint/,
save_on_each_node=False,
save_safetensors=False,
save_steps=300,
save_strategy=steps,
save_total_limit=None,
seed=42,
sharded_ddp=[],
skip_memory_metrics=True,
tf32=False,
tokenizer_path=llama-7b-hf,
torch_compile=False,
torch_compile_backend=None,
torch_compile_mode=None,
torchdynamo=None,
tpu_metrics_debug=False,
tpu_num_cores=None,
train_data_path=['data/age_bias_contain_score_train.json'],
truncation_side=right,
use_ipex=False,
use_legacy_prediction_loop=False,
use_mps_device=False,
valid_data_size=0,
warmup_ratio=0.0,
warmup_steps=100,
weight_decay=0.0,
xpu_backend=None,
)

llama-factory 训练偏好模型的所有超参数

train_args: Seq2SeqTrainingArguments(
_n_gpu=1,
accelerator_config={'split_batches': False, 'dispatch_batches': None, 'even_batches': True, 'use_seedable_sampler': True},
adafactor=False,
adam_beta1=0.9,
adam_beta2=0.999,
adam_epsilon=1e-08,
auto_find_batch_size=False,
bf16=False,
bf16_full_eval=False,
data_seed=None,
dataloader_drop_last=False,
dataloader_num_workers=0,
dataloader_persistent_workers=False,
dataloader_pin_memory=True,
dataloader_prefetch_factor=None,
ddp_backend=None,
ddp_broadcast_buffers=None,
ddp_bucket_cap_mb=None,
ddp_find_unused_parameters=False,
ddp_timeout=1800,
debug=[],
deepspeed=None,
disable_tqdm=False,
dispatch_batches=None,
do_eval=True,
do_predict=False,
do_train=True,
eval_accumulation_steps=None,
eval_delay=0,
eval_steps=50,
evaluation_strategy=steps,
fp16=True,
fp16_backend=auto,
fp16_full_eval=False,

fp16_opt_level=O1,
fsdp=[],
fsdp_config={'min_num_params': 0, 'xla': False, 'xla_fsdp_v2': False, 'xla_fsdp_grad_ckpt': False},
fsdp_min_num_params=0,
fsdp_transformer_layer_cls_to_wrap=None,
full_determinism=False,
generation_config=None,
generation_max_length=None,
generation_num_beams=None,
gradient_accumulation_steps=4,
gradient_checkpointing=False,
gradient_checkpointing_kwargs=None,
greater_is_better=None,
group_by_length=False,
half_precision_backend=auto,
hub_always_push=False,
hub_model_id=None,
hub_private_repo=False,
hub_strategy=every_save,
hub_token=<HUB_TOKEN>,
ignore_data_skip=False,
include_inputs_for_metrics=False,
include_num_input_tokens_seen=False,
include_tokens_per_second=False,
jit_mode_eval=False,
label_names=None,
label_smoothing_factor=0.0,
learning_rate=1e-06,
length_column_name=length,
load_best_model_at_end=False,
local_rank=0,
log_level=passive,
log_level_replica=warning,
log_on_each_node=True,
logging_dir=./rm_checkpoint/llama2/runs/Mar02_03-22-46_ubuntu,
logging_first_step=False,
logging_nan_inf_filter=True,
logging_steps=10,

logging_strategy=steps,
lr_scheduler_kwargs={},
lr_scheduler_type=cosine,
max_grad_norm=1.0,
max_steps=-1,
metric_for_best_model=None,
mp_parameters=,
neftune_noise_alpha=None,
no_cuda=False,
num_train_epochs=1.0,
optim=adamw_torch,
optim_args=None,
output_dir=./rm_checkpoint/llama2,
overwrite_output_dir=False,
past_index=-1,
per_device_eval_batch_size=8,
per_device_train_batch_size=1,
predict_with_generate=False,
prediction_loss_only=False,
push_to_hub=False,
push_to_hub_model_id=None,
push_to_hub_organization=None,
push_to_hub_token=<PUSH_TO_HUB_TOKEN>,
ray_scope=last,
remove_unused_columns=True,
report_to=['wandb'],
resume_from_checkpoint=None,
run_name=./rm_checkpoint/llama2,
save_on_each_node=False,
save_only_model=False,
save_safetensors=True,
save_steps=1000,
save_strategy=steps,
save_total_limit=None,
seed=42,
skip_memory_metrics=True,
sortish_sampler=False,
split_batches=None,
tf32=None,

torch_compile=False,
torch_compile_backend=None,
torch_compile_mode=None,
torchdynamo=None,
tpu_metrics_debug=False,
tpu_num_cores=None,
use_cpu=False,
use_ipex=False,
use_legacy_prediction_loop=False,
use_mps_device=False,
warmup_ratio=0.0,
warmup_steps=0,
weight_decay=0.0,
)

model_args:
ModelArguments(model_name_or_path='/home/student2021/srcao/base_LLM/llama2-7b',
adapter_name_or_path=None, cache_dir=None, use_fast_tokenizer=False,
resize_vocab=False, split_special_tokens=False, model_revision='main',
quantization_bit=None, quantization_type='nf4', double_quantization=True,
rope_scaling=None, flash_attn=False, shift_attn=False, use_unsloth=False,
disable_gradient_checkpointing=False, upcast_layernorm=False,
upcast_lmhead_output=False, hf_hub_token=None, ms_hub_token=None, export_dir=None,
export_size=1, export_quantization_bit=None, export_quantization_dataset=None,
export_quantization_nsamples=128, export_quantization_maxlen=1024,
export_legacy_format=False, export_hub_model_id=None, print_param_status=False)

data_args: DataArguments(template='default', dataset='age_bias_for_train',
dataset_dir='data', split='train', **cutoff_len=1024**, reserved_label_len=1,
train_on_prompt=False, streaming=False, buffer_size=16384, mix_strategy='concat',
interleave_probs=None, overwrite_cache=False, preprocessing_num_workers=None,
max_samples=None, eval_num_beams=None, ignore_pad_token_for_loss=True,
val_size=0.05, sft_packing=False, cache_path=None)

factory 支持的所有参数

usage: train_bash.py [-h] --model_name_or_path MODEL_NAME_OR_PATH
[--adapter_name_or_path ADAPTER_NAME_OR_PATH]

[--cache_dir CACHE_DIR]
[--use_fast_tokenizer [USE_FAST_TOKENIZER]]
[--resize_vocab [RESIZE_VOCAB]]
[--split_special_tokens [SPLIT_SPECIAL_TOKENS]]
[--model_revision MODEL_REVISION]
[--quantization_bit QUANTIZATION_BIT]
[--quantization_type {fp4,nf4}]
[--double_quantization [DOUBLE_QUANTIZATION]]
[--no_double_quantization]
[--rope_scaling {linear,dynamic}]
[--flash_attn [FLASH_ATTN]] [--shift_attn [SHIFT_ATTN]]
[--use_unsloth [USE_UNSLOTH]]
[--disable_gradient_checkpointing [DISABLE_GRADIENT_CHECKPOINTING]]
[--upcast_layernorm [UPCAST_LAYERNORM]]
[--upcast_lmhead_output [UPCAST_LMHEAD_OUTPUT]]
[--hf_hub_token HF_HUB_TOKEN]
[--ms_hub_token MS_HUB_TOKEN] [--export_dir EXPORT_DIR]
[--export_size EXPORT_SIZE]
[--export_quantization_bit EXPORT_QUANTIZATION_BIT]
[--export_quantization_dataset EXPORT_QUANTIZATION_DATASET]
[--export_quantization_nsamples EXPORT_QUANTIZATION_NSAMPLES]
[--export_quantization_maxlen EXPORT_QUANTIZATION_MAXLEN]
[--export_legacy_format [EXPORT_LEGACY_FORMAT]]
[--export_hub_model_id EXPORT_HUB_MODEL_ID]
[--print_param_status [PRINT_PARAM_STATUS]]
[--template TEMPLATE] [--dataset DATASET]
[--dataset_dir DATASET_DIR] [--split SPLIT]
[--cutoff_len CUTOFF_LEN]
[--reserved_label_len RESERVED_LABEL_LEN]
[--train_on_prompt [TRAIN_ON_PROMPT]]
[--streaming [STREAMING]] [--buffer_size BUFFER_SIZE]
[--mix_strategy {concat,interleave_under,interleave_over}]
[--interleave_probs INTERLEAVE_PROBS]
[--overwrite_cache [OVERWRITE_CACHE]]
[--preprocessing_num_workers PREPROCESSING_NUM_WORKERS]
[--max_samples MAX_SAMPLES]
[--eval_num_beams EVAL_NUM_BEAMS]
[--ignore_pad_token_for_loss [IGNORE_PAD_TOKEN_FOR_LOSS]]
[--no_ignore_pad_token_for_loss] [--val_size VAL_SIZE]

[--sft_packing [SFT_PACKING]] [--cache_path CACHE_PATH]
--output_dir OUTPUT_DIR
[--overwrite_output_dir [OVERWRITE_OUTPUT_DIR]]
[--do_train [DO_TRAIN]] [--do_eval [DO_EVAL]]
[--do_predict [DO_PREDICT]]
[--evaluation_strategy {no,steps,epoch}]
[--prediction_loss_only [PREDICTION_LOSS_ONLY]]
[--per_device_train_batch_size PER_DEVICE_TRAIN_BATCH_SIZE]
[--per_device_eval_batch_size PER_DEVICE_EVAL_BATCH_SIZE]
[--per_gpu_train_batch_size PER_GPU_TRAIN_BATCH_SIZE]
[--per_gpu_eval_batch_size PER_GPU_EVAL_BATCH_SIZE]
[--gradient_accumulation_steps GRADIENT_ACCUMULATION_STEPS]
[--eval_accumulation_steps EVAL_ACCUMULATION_STEPS]
[--eval_delay EVAL_DELAY] [--learning_rate LEARNING_RATE]
[--weight_decay WEIGHT_DECAY] [--adam_beta1 ADAM_BETA1]
[--adam_beta2 ADAM_BETA2] [--adam_epsilon ADAM_EPSILON]
[--max_grad_norm MAX_GRAD_NORM]
[--num_train_epochs NUM_TRAIN_EPOCHS]
[--max_steps MAX_STEPS]
[--lr_scheduler_type
{linear,cosine,cosine_with_restarts,polynomial,constant,constant_with_warmup,inverse_sqrt
,reduce_lr_on_plateau}]
[--lr_scheduler_kwargs LR_SCHEDULER_KWARGS]
[--warmup_ratio WARMUP_RATIO]
[--warmup_steps WARMUP_STEPS]
[--log_level {detail,debug,info,warning,error,critical,passive}]
[--log_level_replica {detail,debug,info,warning,error,critical,passive}]
[--log_on_each_node [LOG_ON_EACH_NODE]]
[--no_log_on_each_node] [--logging_dir LOGGING_DIR]
[--logging_strategy {no,steps,epoch}]
[--logging_first_step [LOGGING_FIRST_STEP]]
[--logging_steps LOGGING_STEPS]
[--logging_nan_inf_filter [LOGGING_NAN_INF_FILTER]]
[--no_logging_nan_inf_filter]
[--save_strategy {no,steps,epoch}]
[--save_steps SAVE_STEPS]
[--save_total_limit SAVE_TOTAL_LIMIT]
[--save_safetensors [SAVE_SAFETENSORS]]
[--no_save_safetensors]

[--save_on_each_node [SAVE_ON_EACH_NODE]]
[--save_only_model [SAVE_ONLY_MODEL]]
[--no_cuda [NO_CUDA]] [--use_cpu [USE_CPU]]
[--use_mps_device [USE_MPS_DEVICE]] [--seed SEED]
[--data_seed DATA_SEED] [--jit_mode_eval [JIT_MODE_EVAL]]
[--use_ipex [USE_IPEX]] [--bf16 [BF16]] [--fp16 [FP16]]
[--fp16_opt_level FP16_OPT_LEVEL]
[--half_precision_backend {auto,apex,cpu_amp}]
[--bf16_full_eval [BF16_FULL_EVAL]]
[--fp16_full_eval [FP16_FULL_EVAL]] [--tf32 TF32]
[--local_rank LOCAL_RANK]
[--ddp_backend {nccl,gloo,mpi,ccl,hccl}]
[--tpu_num_cores TPU_NUM_CORES]
[--tpu_metrics_debug [TPU_METRICS_DEBUG]]
[--debug DEBUG [DEBUG ...]]
[--dataloader_drop_last [DATALOADER_DROP_LAST]]
[--eval_steps EVAL_STEPS]
[--dataloader_num_workers DATALOADER_NUM_WORKERS]
[--dataloader_prefetch_factor DATALOADER_PREFETCH_FACTOR]
[--past_index PAST_INDEX] [--run_name RUN_NAME]
[--disable_tqdm DISABLE_TQDM]
[--remove_unused_columns [REMOVE_UNUSED_COLUMNS]]
[--no_remove_unused_columns]
[--label_names LABEL_NAMES [LABEL_NAMES ...]]
[--load_best_model_at_end [LOAD_BEST_MODEL_AT_END]]
[--metric_for_best_model METRIC_FOR_BEST_MODEL]
[--greater_is_better GREATER_IS_BETTER]
[--ignore_data_skip [IGNORE_DATA_SKIP]] [--fsdp FSDP]
[--fsdp_min_num_params FSDP_MIN_NUM_PARAMS]
[--fsdp_config FSDP_CONFIG]
[--fsdp_transformer_layer_cls_to_wrap
FSDP_TRANSFORMER_LAYER_CLS_TO_WRAP]
[--accelerator_config ACCELERATOR_CONFIG]
[--deepspeed DEEPSPEED]
[--label_smoothing_factor LABEL_SMOOTHING_FACTOR]
[--optim
{adamw_hf,adamw_torch,adamw_torch_fused,adamw_torch_xla,adamw_torch_npu_fused,adamw_apex_fused,adafactor,adamw_anyprecision,sgd,adagrad,adamw_bnb_8bit,adamw_8bit,lion_8bit,lion_32bit,paged_adamw_32bit,paged_adamw_8bit,paged_lion_32bit,paged_lion_8

```
bit,rmsprop,rmsprop_bnb,rmsprop_bnb_8bit,rmsprop_bnb_32bit}]
                [--optim_args OPTIM_ARGS] [--adafactor [ADAFACTOR]]
                [--group_by_length [GROUP_BY_LENGTH]]
                [--length_column_name LENGTH_COLUMN_NAME]
                [--report_to REPORT_TO [REPORT_TO ...]]
                [--ddp_find_unused_parameters DDP_FIND_UNUSED_PARAMETERS]
                [--ddp_bucket_cap_mb DDP_BUCKET_CAP_MB]
                [--ddp_broadcast_buffers DDP_BROADCAST_BUFFERS]
                [--dataloader_pin_memory [DATALOADER_PIN_MEMORY]]
                [--no_dataloader_pin_memory]
                [--dataloader_persistent_workers [DATALOADER_PERSISTENT_WORKERS]]
                [--skip_memory_metrics [SKIP_MEMORY_METRICS]]
                [--no_skip_memory_metrics]
                [--use_legacy_prediction_loop [USE_LEGACY_PREDICTION_LOOP]]
                [--push_to_hub [PUSH_TO_HUB]]
                [--resume_from_checkpoint RESUME_FROM_CHECKPOINT]
                [--hub_model_id HUB_MODEL_ID]
                [--hub_strategy {end,every_save,checkpoint,all_checkpoints}]
                [--hub_token HUB_TOKEN]
                [--hub_private_repo [HUB_PRIVATE_REPO]]
                [--hub_always_push [HUB_ALWAYS_PUSH]]
                [--gradient_checkpointing [GRADIENT_CHECKPOINTING]]
                [--gradient_checkpointing_kwargs GRADIENT_CHECKPOINTING_KWARGS]
                [--include_inputs_for_metrics [INCLUDE_INPUTS_FOR_METRICS]]
                [--fp16_backend {auto,apex,cpu_amp}]
                [--push_to_hub_model_id PUSH_TO_HUB_MODEL_ID]
                [--push_to_hub_organization PUSH_TO_HUB_ORGANIZATION]
                [--push_to_hub_token PUSH_TO_HUB_TOKEN]
                [--mp_parameters MP_PARAMETERS]
                [--auto_find_batch_size [AUTO_FIND_BATCH_SIZE]]
                [--full_determinism [FULL_DETERMINISM]]
                [--torchdynamo TORCHDYNAMO] [--ray_scope RAY_SCOPE]
                [--ddp_timeout DDP_TIMEOUT]
                [--torch_compile [TORCH_COMPILE]]
                [--torch_compile_backend TORCH_COMPILE_BACKEND]
                [--torch_compile_mode TORCH_COMPILE_MODE]
                [--dispatch_batches DISPATCH_BATCHES]
                [--split_batches SPLIT_BATCHES]
                [--include_tokens_per_second [INCLUDE_TOKENS_PER_SECOND]]
```

[--include_num_input_tokens_seen [INCLUDE_NUM_INPUT_TOKENS_SEEN]]
[--neftune_noise_alpha NEFTUNE_NOISE_ALPHA]
[--sortish_sampler [SORTISH_SAMPLER]]
[--predict_with_generate [PREDICT_WITH_GENERATE]]
[--generation_max_length GENERATION_MAX_LENGTH]
[--generation_num_beams GENERATION_NUM_BEAMS]
[--generation_config GENERATION_CONFIG]
[--dpo_beta DPO_BETA]
[--dpo_loss {sigmoid,hinge,ipo,kto}] [--dpo_ftx DPO_FTX]
[--ppo_buffer_size PPO_BUFFER_SIZE]
[--ppo_epochs PPO_EPOCHS] [--ppo_logger PPO_LOGGER]
[--ppo_score_norm [PPO_SCORE_NORM]]
[--ppo_target PPO_TARGET]
[--ppo_whiten_rewards [PPO_WHITEN_REWARDS]]
[--ref_model REF_MODEL]
[--ref_model_adapters REF_MODEL_ADAPTERS]
[--ref_model_quantization_bit REF_MODEL_QUANTIZATION_BIT]
[--reward_model REWARD_MODEL]
[--reward_model_adapters REWARD_MODEL_ADAPTERS]
[--reward_model_quantization_bit REWARD_MODEL_QUANTIZATION_BIT]
[--reward_model_type {lora,full,api}]
[--additional_target ADDITIONAL_TARGET]
[--lora_alpha LORA_ALPHA] [--lora_dropout LORA_DROPOUT]
[--lora_rank LORA_RANK] [--lora_target LORA_TARGET]
[--lora_bf16_mode [LORA_BF16_MODE]]
[--use_rslora [USE_RSLORA]]
[--create_new_adapter [CREATE_NEW_ADAPTER]]
[--name_module_trainable NAME_MODULE_TRAINABLE]
[--num_layer_trainable NUM_LAYER_TRAINABLE]
[--use_llama_pro [USE_LLAMA_PRO]]
[--stage {pt,sft,rm,ppo,dpo}]
[--finetuning_type {lora,freeze,full}]
[--disable_version_checking [DISABLE_VERSION_CHECKING]]
[--plot_loss [PLOT_LOSS]] [--do_sample [DO_SAMPLE]]
[--no_do_sample] [--temperature TEMPERATURE]
[--top_p TOP_P] [--top_k TOP_K] [--num_beams NUM_BEAMS]
[--max_length MAX_LENGTH]
[--max_new_tokens MAX_NEW_TOKENS]
[--repetition_penalty REPETITION_PENALTY]

[--length_penalty LENGTH_PENALTY]

train_bash.py: error: argument --warmup_steps: invalid int value: '100--num_train_epochs'