Step 1: Load the Qwen2.5-0.5B Model and Tokenizer

The `load_in_4bit` and `load_in_8bit` arguments are deprecated and will be r emoved in the future versions. Please, pass a `BitsAndBytesConfig` object in `quantization_config` argument instead.

Sliding Window Attention is enabled but not implemented for `sdpa`; unexpect ed results may be encountered.

Step 2: Prepare the LoRA Configuration with PEFT

```
In [2]: from peft import PeftModel, get_peft_model, LoraConfig, TaskType

peft_config = LoraConfig(
    r=8,
    lora_alpha=32,
    lora_dropout=0.1,
    bias="none",
    task_type=TaskType.CAUSAL_LM
)

# Only apply LoRA if not already applied
if not isinstance(model, PeftModel):
    model = get_peft_model(model, peft_config)

model.print_trainable_parameters()
```

trainable params: 540,672 || all params: 494,573,440 || trainable%: 0.1093

Step 3: Load and Preprocess the ne-en Dataset

```
In [3]: from datasets import load_dataset
from datasets.dataset_dict import DatasetDict
```

```
# 1. Load full dataset (only has a "train" split)
         raw_dataset = load_dataset("CohleM/english-to-nepali")
         # 2. Shuffle and split into train/validation (e.g. 90/10)
         split_dataset = raw_dataset["train"].train_test_split(test_size=0.1, seed=42
         # 3. (Optional) Rename keys for consistency
         dataset = DatasetDict({
             "train": split dataset["train"],
             "validation": split dataset["test"]
         })
        README.md:
                     0%|
                                  | 0.00/328 [00:00<?, ?B/s]
        (...)-00000-of-00001-ea91b3ffe2804196.parquet: 0%|
                                                                    | 0.00/28.9M [0
        0:00<?. ?B/sl
        Generating train split:
                                               | 0/177334 [00:00<?, ? examples/s]
                                  0%|
In [11]: print(f"Total: {len(dataset['train']) + len(dataset['validation']) / 1e3:.1f
         print(f"Train: {len(dataset['train']) / 1e3:.1f}k")
         print(f"Val: {len(dataset['validation']) / 1e3:.1f}k\n")
         print(dataset)
        Total: 159617.7k
        Train: 159.6k
        Val: 17.7k
        DatasetDict({
            train: Dataset({
                features: ['en', 'ne'],
                num rows: 159600
            })
            validation: Dataset({
                features: ['en', 'ne'],
                num rows: 17734
            })
        })
In [12]: # Set slice sizes
         TRAIN SIZE = 100000
         VAL SIZE = 1000
         # Randomly shuffle and select subsets
         small dataset = {
             "train": dataset["train"].shuffle(seed=42).select(range(TRAIN_SIZE)),
             "validation": dataset["validation"].shuffle(seed=42).select(range(VAL_SI
In [15]: import random
         ne2en templates = [
             "User: Translate Nepali to English: {ne}\nAssistant: {en}",
             "User: What is the English translation of: {ne}?\nAssistant: {en}",
             "User: Please convert this to English: {ne}\nAssistant: {en}"
         en2ne templates = [
```

```
"User: Translate English to Nepali: {en}\nAssistant: {ne}",
             "User: What is the Nepali translation of: {en}?\nAssistant: {ne}",
             "User: Please convert this to Nepali: {en}\nAssistant: {ne}"
         def preprocess(example):
             ne = example["ne"].strip()
             en = example["en"].strip()
             if random.random() < 0.5:</pre>
                 prompt = random.choice(ne2en_templates).format(ne=ne, en=en)
             else:
                 prompt = random.choice(en2ne templates).format(ne=ne, en=en)
             tokenized = tokenizer(prompt, truncation=True, padding="max length", max
             tokenized["labels"] = tokenized["input ids"].copy()
             return tokenized
In [16]: tokenized_dataset = {
             "train": small_dataset["train"].map(preprocess, batched=False),
             "validation": small_dataset["validation"].map(preprocess, batched=False)
        Map:
               0%|
                            | 0/100000 [00:00<?, ? examples/s]
                            | 0/1000 [00:00<?, ? examples/s]
        Map:
               0%|
```

Step 4: Setup Training with Trainer

```
In [17]: from transformers import TrainingArguments, Trainer
         training_args = TrainingArguments(
             output_dir="./qwen2.5-lora-CohleM/english-to-nepali",
             #logging dir="./gwen2.5-lora-CohleM/logging",
             per device train batch size=2,
             per_device_eval_batch_size=2,
             gradient accumulation steps=4,
             eval_strategy="steps",
             eval_steps=500,
             save steps=1000,
             logging_steps=100,
             num_train_epochs=1,
             learning_rate=2e-4,
             warmup steps=100,
             weight_decay=0.01,
             save_total_limit=2,
             fp16=True,
             report_to="none" #report_to="tensorboard" or "wandb"
             # if report to tensor board then run:
             # tensorboard --logdir=loggings --port=6006
         # model.gradient checkpointing enable()
         trainer = Trainer(
```

```
model=model,
args=training_args,
train_dataset=tokenized_dataset["train"],
eval_dataset=tokenized_dataset["validation"]
)
```

No label_names provided for model class `PeftModelForCausalLM`. Since `PeftModel` hides base models input arguments, if label_names is not given, label_names can't be set automatically within `Trainer`. Note that empty label_names list will be used instead.

Step 5: Evaluate before training

```
In [20]: import evaluate
         import torch
         from tqdm import tqdm
         def evaluate_translation(model, tokenizer, dataset, direction="ne2en", max_s
             assert direction in ["ne2en", "en2ne"], "Direction must be 'ne2en' or 'e
             # Use BLEU for ne→en, chrF for en→ne
             metric = evaluate.load("bleu") if direction == "ne2en" else evaluate.loa
             predictions, references = [], []
             model.eval()
             for i, example in enumerate(tqdm(dataset["validation"].select(range(max
                 ne = example["ne"].strip()
                 en = example["en"].strip()
                 if direction == "ne2en":
                     prompt = f"User: Translate Nepali to English: {ne}\nAssistant:"
                     expected = en
                 else:
                     prompt = f"User: Translate English to Nepali: {en}\nAssistant:"
                     expected = ne
                  inputs = tokenizer(prompt, return_tensors="pt").to(model.device)
                 with torch.no grad():
                     outputs = model.generate(
                          **inputs,
                         max_new_tokens=100,
                          do sample=False,
                          pad_token_id=tokenizer.eos_token_id
                      )
                 output = tokenizer.decode(outputs[0], skip_special_tokens=True)
                  response = output.split("Assistant:")[-1].strip() if "Assistant:" in
                  predictions.append(response)
                  references.append([expected] if direction == "ne2en" else expected)
                 if i < show_samples:</pre>
                     print(f"\n ◆ Sample #{i + 1}")
```

```
print(" Prompt:", prompt)
       print(" Prediction:", response)
       print("→ Reference:", expected)
# Compute final metric
score = metric.compute(predictions=predictions, references=references)
metric name = "BLEU" if direction == "ne2en" else "chrF"
score value = score["bleu"] * 100 if direction == "ne2en" else score["sc
print(f"----\ni {metric name} ({direction}): {score value:.2f}----
return score_value
```

In [21]: evaluate translation(model, tokenizer, small dataset, direction="ne2en", max evaluate_translation(model, tokenizer, small_dataset, direction="en2ne", max

```
Evaluating NE2EN:
                  1%|
```

| 1/100 [00:06<11:12, 6.80s/it]

- Sample #1
- 📥 Prompt: User: Translate Nepali to English: यसलाई त्याग। यसलाई काटेर पनि नजाऊ! त्य सलाई तिम्रो पिठयँ फर्काई देऊ अनि टाढा हिँड।

Assistant:

- Prediction: 你好,我来! 你好,我来! 你好,我来! 你好,我来! 你好,我来! 来! 你好,我来! 你好,我来! 你好,我来! 你好,我来! 你好,我来! 你好,我来! 你好,我 来! 你好,我来! 你好,我来! 你好,我来! 你好,我
- Reference: Avoid it, and don't pass by it. Turn from it, and pass on.

Evaluating NE2EN: 2%

| 2/100 [00:13<11:03, 6.77s/it]

- Sample #2
- 📥 Prompt: User: Translate Nepali to English: (नियम ६ को उपनियम (१) को खण्ड (क) सँग सम्बन्धित) कठिन काम

Assistant:

- Prediction: The Nepali language is a language spoken by people in Nepal, a country in South Asia. The language is written in the Nepali script, which is a unique form of writing that uses a combination of pictographs and a set of symbols to represent the language. The language is written using a unique script that is unique to the Nepali language, and it is written using a uniq ue set of symbols that are unique to the Nepali language. The language is wr itten using a unique set of symbols that
- Reference: (Related to Clause (a) of Sub-rule(1) of Rule 6) Difficult Job

Evaluating NE2EN: 3%

| 3/100 [00:20<10:55, 6.76s/it]

- Sample #3
- 📥 Prompt: User: Translate Nepali to English: सम्बन्धित व्यक्तिलाई भएको हानि नोक्सानी बाप त दिइने क्षतिपूर्तिको रकम नियम ३५ को उपनियम (२) बमोजिम गठित क्षतिपूर्ति निर्धारण समितिले निर्धारण गरे ब मोजिम हुनेछ ।

Assistant:

- 🔵 Prediction: नियम निर्धारण करणे विकसिया बापत दिए एक व्यक्तिलाई भएको हानि नोक्सानी बापत दिए ए क बमोजिम गठित क्षतिप
- ◆ Reference: To be Compensate d:- (1) The amount of compensation to be give n to the aggrieved person due to prohibition made pursuant to Rule 33 shall be as determined by the Compensation Fixation Committee formed pursuant to S ub-rule (2) of Rule 35.

```
Evaluating NE2EN:
                   4%|
| 4/100 [00:23<08:38, 5.40s/it]
```

- ◆ Sample #4
- Prompt: User: Translate Nepali to English: कालोबजार तथा केही अन्य सामाजिक अपराध तथा सजाय ऐन, २०३२

Assistant:

Prediction: The Nepali language is a language spoken in Nepal, and it is written in the Nepali script. The Nepali language is a language that is used to communicate with people in Nepal, and it is written in the Nepali script.
◆ Reference: Black-marketing and Some Other Social Offenses and Punishment

Act, 2032 (1975)

Evaluating NE2EN: 5%| 5/100 [00:30<09:19, 5.89s/it]

- ◆ Sample #5
- Prompt: User: Translate Nepali to English: तिनीहरूले रोदालाई भने, "तँ पागल होस्!" त र उसले यो साँचो हो भनी रही। ती झुण्डले भने, "यो पत्रुसको स्वर्गदूत हुनुपर्छ।"

Assistant:

- Prediction: तिनीहरूले रोदालाई भने, "तँ पागल होस्!" तर उसले यो साँचो हो भनी रही। ती झुण्डले भ ने, "यो पत्रुसको स्वर्गदूत
- ◆ Reference: They said to her, "You are crazy!" But she insisted that it was so. They said, "It is his angel."

Evaluating NE2EN: 100%| | 100/100 [08:48<00:00, 5.29s/i t]

■ BLEU (ne2en): 0.00-----

Evaluating EN2NE: 1%|■

| 1/100 [00:01<02:09, 1.31s/it]

- ◆ Sample #1
- Prompt: User: Translate English to Nepali: Avoid it, and don't pass by it. Turn from it, and pass on.

Assistant:

- Prediction: Please, and don't pass by it. Turn to the right, and pass on.
- ♦ Reference: यसलाई त्याग। यसलाई काटेर पनि नजाऊ! त्यसलाई तिम्रो पिठुयूँ फर्काई देऊ अनि टाढा हिँड।

Evaluating EN2NE: 2%

| 2/100 [00:08<07:21, 4.51s/it]

- ◆ Sample #2
- Prompt: User: Translate English to Nepali: (Related to Clause (a) of Subrule(1) of Rule 6) Difficult Job

Assistant:

Prediction: (a) Translate English to Nepali: (Related to Clause (a) of Sub-rule(1) of Rule 6) Difficult Job

Answer: (a) Translate English to Nepali: (Related to Clause (a) of Sub-rule (1) of Rule 6) Difficult Job

You are an AI assistant. You will be only able to process and provide feedback on the answer to the question. You will not be able to provide feedback on the answer to the

• Reference: (नियम ६ को उपनियम (१) को खण्ड (क) सँग सम्बन्धित) कठिन काम

Evaluating EN2NE: 3%| 3/100 [00:09<05:07, 3.17s/it]

- ◆ Sample #3
- Prompt: User: Translate English to Nepali: To be Compensate d:- (1) The a mount of compensation to be given to the aggrieved person due to prohibition made pursuant to Rule 33 shall be as determined by the Compensation Fixation Committee formed pursuant to Sub-rule (2) of Rule 35.

Assistant:

- Prediction: To be compensated, the aggrieved person shall be entitled to receive compensation for the harm caused by the prohibition.
- Reference: सम्बन्धित व्यक्तिलाई भएको हानि नोक्सानी बापत दिइने क्षतिपूर्तिको रकम नियम ३५ को उपनियम (२) बमोजिम गठित क्षतिपूर्ति निर्धारण समितिले निर्धारण गरे बमोजिम हनेछ ।

Evaluating EN2NE: 4%| 4/100 [00:16<07:19, 4.58s/it]

- Sample #4
- Prompt: User: Translate English to Nepali: Black-marketing and Some Other Social Offenses and Punishment Act, 2032 (1975)

Assistant:

- Prediction: The Black-marketing and Some Other Social Offenses and Punish ment Act, 2032 (1975) is an act in the Republic of Nepal. It is a criminal c ode that was passed in 1975. The act is also known as the Black-marketing and Some Other Social Offenses and Punishment Act, 2032 (1975) and the Black-marketing and Some Other Social Offenses and Punishment Act, 2
- ♦ Reference: कालोबजार तथा केही अन्य सामाजिक अपराध तथा सजाय ऐन, २०३२

Evaluating EN2NE: 5%| 5/100 [00:23<08:29, 5.36s/it]

- ◆ Sample #5
- Prompt: User: Translate English to Nepali: They said to her, "You are crazy!" But she insisted that it was so. They said, "It is his angel."
- Prediction: "हे आप जाने में जाने में
- Reference: तिनीहरूले रोदालाई भने, "तँ पागल होस्!" तर उसले यो साँचो हो भनी रही। ती झुण्डले भने, "यो पत्रुसको स्वर्गदूत हुनुपर्छ।"

Evaluating EN2NE: 100%| | 100/100 [06:46<00:00, 4.07s/it]

ii chrF (en2ne): 1.86-----

Out[21]: 1.8599192292711046

Step 6: Train the Model

In []: import torch
torch.cuda.empty_cache()
trainer.train()

○ [6774/11111 2:45:06 < 1:45:44, 0.68 it/s,</p>

Epoch 0.61/1]

| Step | Training Loss | Validation Loss |
|------|---------------|-----------------|
| 500 | 0.952700 | 0.994959 |
| 1000 | 0.955500 | 0.938049 |
| 1500 | 0.888900 | 0.906445 |
| 2000 | 0.927000 | 0.887636 |
| 2500 | 0.860500 | 0.872300 |
| 3000 | 0.832300 | 0.862505 |
| 3500 | 0.862600 | 0.853201 |
| 4000 | 0.828000 | 0.845881 |
| 4500 | 0.822400 | 0.838672 |
| 5000 | 0.868300 | 0.833668 |
| 5500 | 0.809400 | 0.828560 |
| 6000 | 0.850100 | 0.823887 |
| 6500 | 0.817600 | 0.820297 |

Step 7: Evaluate afer training

Evaluating NE2EN: 1%|■

| 1/100 [00:01<02:14, 1.36s/it]

- ◆ Sample #1
- 📥 Prompt: User: Translate Nepali to English: यसलाई त्याग। यसलाई काटेर पनि नजाऊ! त्य सलाई तिम्रो पिठ्यूँ फर्काई देऊ अनि टाढा हिँड।

Assistant:

- Prediction: I will make you a servant, and I will make you a servant of the people.
- Reference: Avoid it, and don't pass by it. Turn from it, and pass on.

Evaluating NE2EN: 2%

| 2/100 [00:02<01:49, 1.12s/it]

- ◆ Sample #2
- 👱 Prompt: User: Translate Nepali to English: (नियम ६ को उपनियम (१) को खण्ड (क) सँग सम्बन्धित) कठिन काम

Assistant:

- Prediction: (a) The functions of the Board shall be as follows:
- Reference: (Related to Clause (a) of Sub-rule(1) of Rule 6) Difficult Job

Evaluating NE2EN: 3%

| 3/100 [00:03<01:53, 1.17s/it]

- Sample #3
- Prompt: User: Translate Nepali to English: सम्बन्धित व्यक्तिलाई भएको हानि नोक्सानी बाप त दिइने क्षतिपूर्तिको रकम नियम ३५ को उपनियम (२) बमोजिम गठित क्षतिपूर्ति निर्धारण समितिले निर्धारण गरे ब मोजिम हुनेछ ।

Assistant:

- Prediction: The amount of the amount of the loan shall be determined according to the following rules:
- Reference: To be Compensate d:- (1) The amount of compensation to be give n to the aggrieved person due to prohibition made pursuant to Rule 33 shall be as determined by the Compensation Fixation Committee formed pursuant to Sub-rule (2) of Rule 35.

Evaluating NE2EN: 4%

| 4/100 [00:04<01:46, 1.11s/it]

- ◆ Sample #4
- Prompt: User: Translate Nepali to English: कालोबजार तथा केही अन्य सामाजिक अपराध तथा सजाय ऐन, २०३२

Assistant:

- Prediction: The Act, 2032 (1998)
- ◆ Reference: Black-marketing and Some Other Social Offenses and Punishment Act, 2032 (1975)

Evaluating NE2EN: 5%

| 5/100 [00:05<01:47, 1.13s/it]

- Sample #5
- Prompt: User: Translate Nepali to English: तिनीहरूले रोदालाई भने, "तँ पागल होस्!" त र उसले यो साँचो हो भनी रही। ती झुण्डले भने, "यो पत्रुसको स्वर्गदूत हुनुपर्छ।"

Assistant:

- Prediction: They said to him, "This is the mountain of the house of God."
- ◆ Reference: They said to her, "You are crazy!" But she insisted that it was so. They said, "It is his angel."

Evaluating NE2EN: 100%

1.90s/it]

■ BLEU (ne2en): 4.95-----

Evaluating EN2NE: 1%|■

| 1/100 [00:06<11:04, 6.72s/it]

- Sample #1
- Prompt: User: Translate English to Nepali: Avoid it, and don't pass by it. Turn from it, and pass on.

Assistant:

- Prediction: तर तिमीहरूलो तिमीहरूलोई तिमीहरूलोई तिमीहरूलोई तिमीहरूलोई तिमीहरूलोई तिमीहरूलोई तिमीहरूलोई तिमीहरूलोई त
- 🔶 Reference: यसलाई त्याग। यसलाई काटेर पनि नजाऊ! त्यसलाई तिम्रो पिठ्यूँ फर्काई देऊ अनि टाढा हिँड।

Evaluating EN2NE: 2%

| 2/100 [00:09<07:21, 4.51s/it]

- ◆ Sample #2
- Prompt: User: Translate English to Nepali: (Related to Clause (a) of Subrule(1) of Rule 6) Difficult Job

Assistant:

- Prediction: (नियम ६ को उपनियम (१) बमोजिमको विवरण) विवरण
- Reference: (नियम ६ को उपनियम (१) को खण्ड (क) सँग सम्बन्धित) कठिन काम

Evaluating EN2NE: 3%

| 3/100 [00:16<08:53, 5.50s/it]

- ◆ Sample #3
- rompt: User: Translate English to Nepali: To be Compensate d:- (1) The a mount of compensation to be given to the aggrieved person due to prohibition made pursuant to Rule 33 shall be as determined by the Compensation Fixation Committee formed pursuant to Sub-rule (2) of Rule 35.

Assistant:

- Prediction: ३३. अधिकार विभिन्न निकायको निर्णय ः (१) नियम ३३ बमोजिमको निर्णय दिने निकायको निर्णय दिने व्यक्त
- Reference: सम्बन्धित व्यक्तिलाई भएको हानि नोक्सानी बापत दिइने क्षतिपूर्तिको रकम नियम ३५ को उपनियम (२) बमोजिम गठित क्षतिपूर्ति निर्धारण समितिले निर्धारण गरे बमोजिम हनेछ ।

Evaluating EN2NE: 4%| 4/100 [00:19<07:01, 4.39s/it]

- Sample #4
- Prompt: User: Translate English to Nepali: Black-marketing and Some Other Social Offenses and Punishment Act, 2032 (1975)

Assistant:

- Prediction: २०३२ द्वारा नियम नियम बाट बनाउने ः
- ♦ Reference: कालोबजार तथा केही अन्य सामाजिक अपराध तथा सजाय ऐन, २०३२

Evaluating EN2NE: 5%| 5/100 [00:25<08:16, 5.22s/it]

- Sample #5
- Prompt: User: Translate English to Nepali: They said to her, "You are crazy!" But she insisted that it was so. They said, "It is his angel." Assistant:
- Prediction: तिनीहरूले तिनीहरूलाई भन्नुभयो, "हे तिनीहरूलाई भन्नुभयो।" तिनीहरूले भन्नुभयो, "हे तिनीहरूलाई भन्न
- ◆ Reference: तिनीहरूले रोदालाई भने, "तँ पागल होस्!" तर उसले यो साँचो हो भनी रही। ती झुण्डले भने, "यो पत्रुसको स्वर्गदूत हुनुपर्छ।"

Evaluating EN2NE: 100%| | 100/100 [08:51<00:00, 5.32s/it]

ii chrF (en2ne): 13.21-----

Out[29]: 13.213773592788344

Step 8: Inference

from peft import PeftModel

```
In []: # # If load from hugging face:
    # from transformers import AutoTokenizer, AutoModelForCausalLM
    # from peft import PeftModel

# base = AutoModelForCausalLM.from_pretrained("Qwen/Qwen2.5-0.5B", load_in_4
    # tokenizer = AutoTokenizer.from_pretrained("jingmingliu01/qwen2.5-lora-ne-e
# model = PeftModel.from_pretrained(base, "jingmingliu01/qwen2.5-lora-ne-en")
In [12]: # # IF load from local
```

from transformers import AutoTokenizer, AutoModelForCausalLM

```
# base = AutoModelForCausalLM.from pretrained("Qwen/Qwen/2.5-0.5B", load in 4
         # tokenizer = AutoTokenizer.from pretrained("gwen2.5-lora-ne-en-local", trus
         # model = PeftModel.from pretrained(base, "gwen2.5-lora-ne-en-local")
        The `load_in_4bit` and `load_in_8bit` arguments are deprecated and will be r
        emoved in the future versions. Please, pass a `BitsAndBytesConfig` object in
        `quantization config` argument instead.
In [30]: def simple_translate(prompt):
             inputs = tokenizer(prompt, return tensors="pt").to(model.device)
             outputs = model.generate(
                 **inputs,
                 max new tokens=100,
                 do sample=False,
                 pad_token_id=tokenizer.eos_token_id
             return tokenizer.decode(outputs[0], skip special tokens=True)
In [33]: prompt = "User: Translate English to Nepali: How are you?\nAssistant:"
         print(simple translate(prompt))
        User: Translate English to Nepali: How are you?
        Assistant: तपाईं यस देखाउनूहन्छ?
```

User: Translate Nepali to English: तपाई कस्तो हुनुहुन्छ Assistant: This is not a valid number

print(simple translate(prompt))

In [34]: prompt = "User: Translate Nepali to English: तपाई कस्तो हुनुहुन्छ\nAssistant:"

Save

```
In [ ]: model.push_to_hub("jingmingliu01/qwen2.5-lora-ne-en")
        tokenizer.push to hub("jingmingliu01/gwen2.5-lora-ne-en")
                                                 | 0.00/2.18M [00:00<?, ?B/s]
       adapter model.safetensors:
                                    0%|
       README.md:
                                 | 0.00/5.17k [00:00<?, ?B/s]
                    0%|
       tokenizer.json:
                                      | 0.00/11.4M [00:00<?, ?B/s]
                         0%|
Out[]: CommitInfo(commit_url='https://huggingface.co/jingmingliu01/qwen2.5-lora-ne
        -en/commit/c16571973e99b4caec471de285709ced6fbefde1', commit message='Uploa
        d tokenizer', commit_description='', oid='c16571973e99b4caec471de285709ced6
        fbefde1', pr_url=None, repo_url=RepoUrl('https://huggingface.co/jingmingliu
        01/qwen2.5-lora-ne-en', endpoint='https://huggingface.co', repo_type='mode
        l', repo_id='jingmingliu01/qwen2.5-lora-ne-en'), pr_revision=None, pr_num=N
        one)
In []: model.save pretrained("gwen2.5-lora-ne-en-local")
        tokenizer.save pretrained("qwen2.5-lora-ne-en-local")
```