Food Recipe Generator - Setup & Installation

Setup Commands

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STEP 1: Clone Repository
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git clone https://github.com/facebookresearch/inversecooking.git
cd inversecooking

STEP 2: Create Virtual Environment
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python -m venv .venv
.venv\Scripts\activate

STEP 3: Install Dependencies
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pip install torch torchvision torchaudio --index-url https://download.pytorch.org/whl/cu124
pip install gradio pillow tqdm

STEP 4: Fix PyTorch 2.x Compatibility
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# In src/modules/transformer_decoder.py
# Change line with torch.uint8 to torch.bool for mask tensors

STEP 5: Download Pre-trained Weights
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# Download modelbest.ckpt from:
# https://dl.fbaipublicfiles.com/inversecooking/modelbest.ckpt
# Place in data/ folder

STEP 6: Verify GPU
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python -c "import torch; print(torch.cuda.is_available())"
# Should print: True
```

Dataset Preparation

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DATASET PREPARATION:

Indian Food Dataset (from Kaggle):
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# 80 categories, ~4,000 images
# Source: iamsouravbanerjee/indian-food-images-dataset

Food-101 Dataset (Western):
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# 101 categories, 101,000 images
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# Downloaded via torchvision.datasets.Food101

Combined Dataset Statistics:
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- Total Classes: 181
- Training Images: 113,900
- Validation Images: 20,760
- Test Images: Available for evaluation
- Average per class: ~629 images
```