

Dependencies & Environment

This project requires the following software and packages:

Python Version:

- Python 3.8 or later

Core Dependencies:

- accelerate==1.5.2
- aiohappyeyeballs==2.6.1
- aiohttp==3.11.14
- aiosignal==1.3.2
- appnope==0.1.4
- asttokens==3.0.0
- attrs==25.3.0
- certifi==2025.1.31
- charset-normalizer==3.4.1
- click==8.1.8
- comm==0.2.2
- contourpy==1.3.1
- cycler==0.12.1
- datasets==3.5.0
- debugpy==1.8.13
- decorator==5.2.1
- dill==0.3.8
- executing==2.2.0
- filelock==3.18.0
- fonttools==4.56.0
- frozenlist==1.5.0
- fsspec==2024.12.0
- huggingface-hub==0.29.3
- idna==3.10
- ipykernel==6.29.5
- ipython==9.0.2
- ipython_pygments_lexers==1.1.1
- jedi==0.19.2
- Jinja2==3.1.6
- joblib==1.4.2
- jupyter_client==8.6.3
- jupyter_core==5.7.2
- kiwisolver==1.4.8
- MarkupSafe==3.0.2
- matplotlib==3.10.1
- matplotlib-inline==0.1.7
- mpmath==1.3.0
- multidict==6.2.0
- multiprocessing==0.70.16
- nest-asyncio==1.6.0
- networkx==3.4.2
- nltk==3.9.1
- numpy==2.2.4
- packaging==24.2
- pandas==2.2.3
- parso==0.8.4

- pexpect==4.9.0
- pillow==11.1.0
- platformdirs==4.3.7
- prompt_toolkit==3.0.50
- propcache==0.3.1
- psutil==7.0.0
- ptyprocess==0.7.0
- pure_eval==0.2.3
- pyarrow==19.0.1
- Pygments==2.19.1
- pyparsing==3.2.3
- python-dateutil==2.9.0.post0
- pytz==2025.2
- PyYAML==6.0.2
- pyzmq==26.3.0
- regex==2024.11.6
- requests==2.32.3
- safetensors==0.5.3
- scikit-learn==1.6.1
- scipy==1.15.2
- seaborn==0.13.2
- sentence-transformers==4.0.1
- six==1.17.0
- stack-data==0.6.3
- sympy==1.13.1
- threadpoolctl==3.6.0
- tokenizers==0.21.1
- torch==2.6.0
- tornado==6.4.2
- tqdm==4.67.1
- traitlets==5.14.3
- transformers==4.50.3
- typing_extensions==4.13.0
- tzdata==2025.2
- urllib3==2.3.0
- wcwidth==0.2.13
- xgboost==3.0.0
- xxhash==3.5.0
- yarl==1.18.3

Optional:

- Google Colab or Jupyter Notebook for execution
- GPU (e.g., Colab GPU or CUDA-compatible hardware) recommended for BERT training