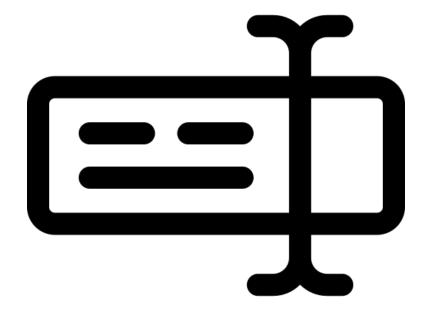
Arabic Autocomplete System

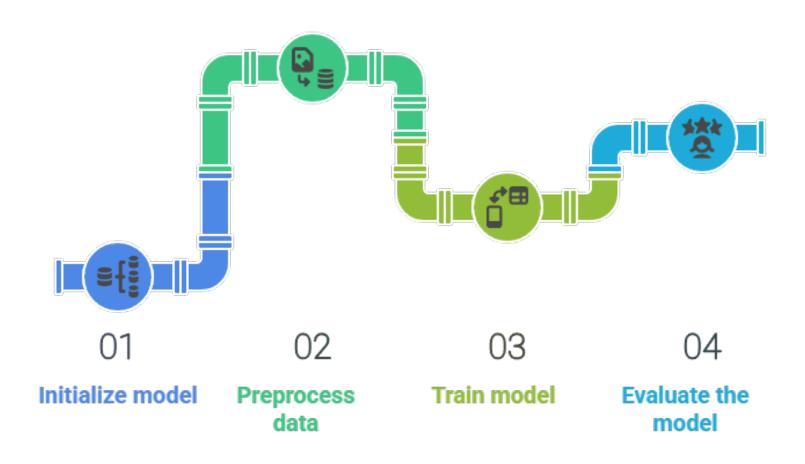


Model Architecture and Base Model

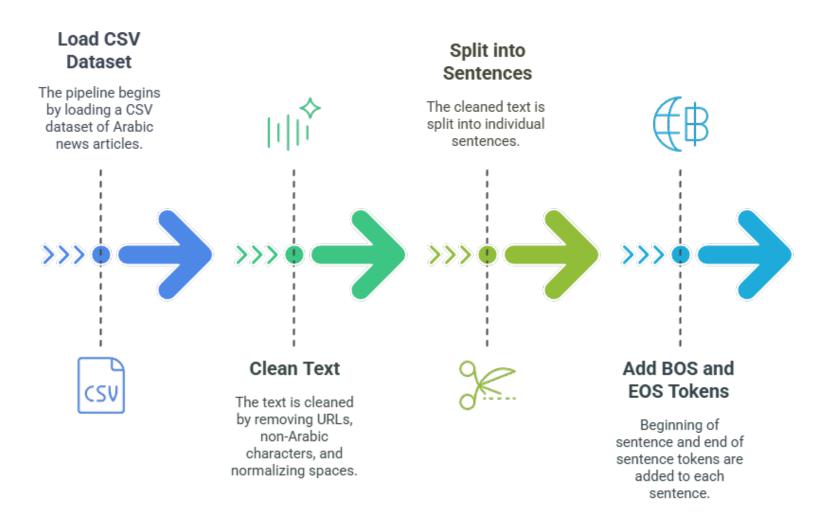
- Uses aubmindlab/aragpt2base as foundation
- Pre-trained Arabic GPT-2 model
- Transformer-based architecture



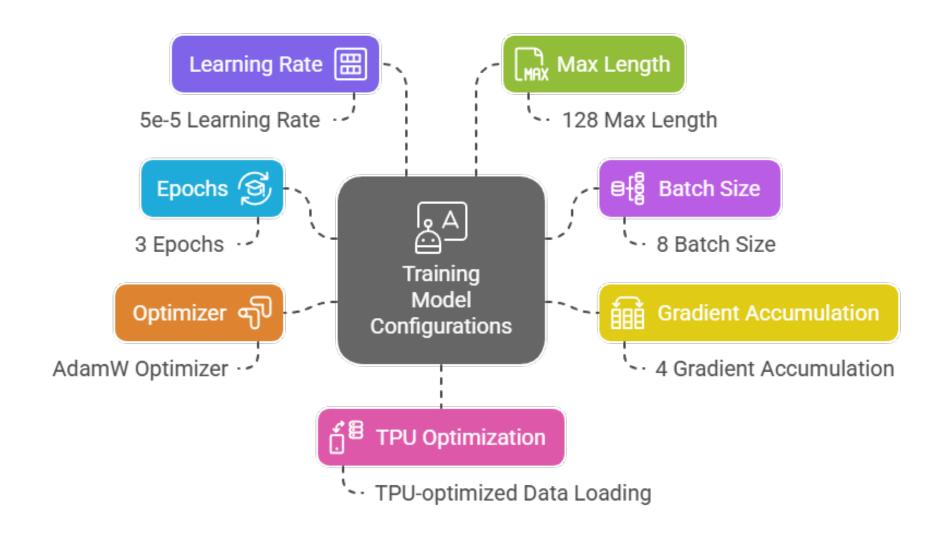
Pipeline



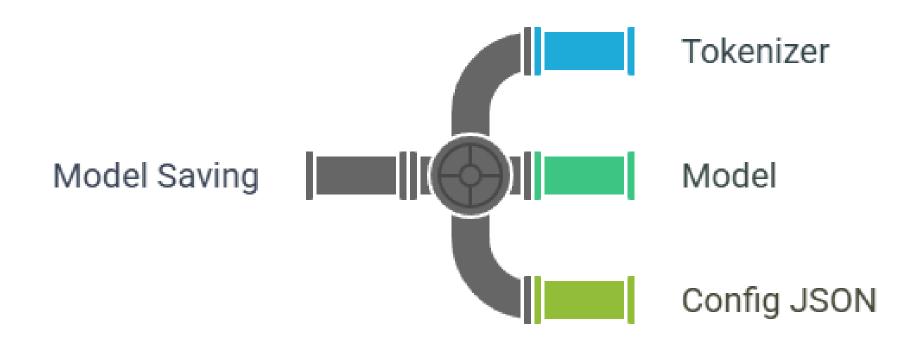
Data Preprocessing Pipeline for Arabic News



Training Model Configurations



Model Saving



Made with 🐎 Napkin

Evaluation process

Evaluation

Evaluating model performance using test sentences. Perplexity Score

Displays a perplexity score of 200.

Made with ≽ Napkin

Arabic Autocomplete System (GUI)

User Input

User enters text into the GUI

Generate Predictions

The program generates next-word predictions

Handle Arabic Input

The program handles Arabic input

Process Text

The program processes the input text

Apply Softmax

Softmax function is applied to logits

Return Top 4 Predictions

The program returns the top 4 predictions