

UI, which uses the localhost to display itself.

MA-LLM

AI-powered screening tool to select papers for meta-analysis: comparison with manual screening or comparison-free selection.

1. Configuration

Entrez Email: ?

Please enter a valid email address.

AI Provider: ?

Select Provider

Model Name: ?

Please enter a model name.

API Key: ?

Please enter an API key.

2. Screening Mode

Screening Mode: ?

Specify Screening Mode

3. Start Process

Start Screening

Status: Idle

The Entrez Email, is used to

fetch the paper from
the PubMed API.

The AI provider is necessary to ensure the
correct connection with your AI model.

Through slight changes in the Python code and
the html file the list is customizable.

The Model name is used to specify the
exact model, which you want to work with and
the API Key provides the access to the used model.

The screening mode decides whether you want the compare the AI screening
with a known result using the Screening Selection Comparison or if you are only interested to
screen paper using an AI without any comparison in the Comparison-free Screening mode.

Screening Selection Comparison

Comparison-free Screening

2. Screening Mode

Screening Mode: ?

Screening Selection Comparison

Screening Selection Comparison Files

Initial PMIDs (.txt): ?

Keine ausgewählt

Gold Standard PMIDs (.txt): ?

Keine ausgewählt

Prompts (.xlsx): ?

Keine ausgewählt

The Initial.txt file contains the pmids of
all papers to screen in the following form:

Initial.txt

```
1 16279822
2 26672700
3 22900592
4 37959247
```

The Goldstandard_Selected.txt file contains the pmids of
the papers which have been selected by human screeners and
they have the same form as the Initial.txt file.

Goldstandard_Selected.txt

```
1 23726340
2 19892291
3 25406652
4 20685519
```

The Prompts.xlsx contains the prompts for the AI model
to screen with additionally it will be the output file which
is returned as the intermediate result or after finishing the
hole screening, but with additionall metrics added to the
Excel file.

Prompts.xlsx

	A	B	C	D
1	TitlePrompt	AbstractPrompt	screen_titles	screen_abstra...
2	Screen the scientific paper abstracts below to ...	Screen the scientific paper abstracts below to ...	0	1
3	Analyze the provided abstracts to determine t...	Analyze the provided abstracts to determine t...	0	1
4	Review and assess the following paper abstra...	Review and assess the following paper abstra...	0	1

2. Screening Mode

Screening Mode: ?

Comparison-free Screening

Comparison-free Screening Configuration

PubMed Search Query: ?

Enter your PubMed search query (e.g., 'cancer therapy')

Max Articles to Screen: ?

1000

Screening Prompt: ?

Specify the prompt that will be used to screen articles

Screening Level: ?

☒ Titles Only

☐ Abstracts Only

☐ Titles then Abstracts (Sequential)

The PubMed search query will filter
the papers that are fetched from PubMed.

This number determines how many of the first
paper which are provided by the PubMed search
are used for the screening.

This prompt is passed to your AI model of
choice with the paper that have been selected to find
the most fitting ones for your task.

The screening level offer the option to screen only the titels,
only the abstract or like human screening would perform a search,
first screening the titles and for the remaining ones the abstracts are read.

3. Start Process

Start Screening

Status: Idle