FRAUNHOFER »TEUKEN Chat« LICENSE FOR SCIENTIFIC NON-COMMERCIAL RESEARCH PURPOSES

(hereinafter referred to as »License«)

Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V., Hansastraße 27c, 80686 Munich, Germany ("**Fraunhofer**"), is an organization for application-oriented research and pursues exclusively and directly non-profit purposes.

The Fraunhofer Institute for Intelligent Analysis and Information Systems (IAIS) conducts research in the field of the development of innovative AI applications for industry, health, and sustainability, with futureoriented technologies such as large AI language models or quantum machine learning, offers for training and further education or for testing AI applications for security and trustworthiness and has developed the software »TEUKEN Chat« as part of its activities. Fraunhofer has the rights to use and exploit the aforementioned software, with the exception of those components that constitute third-party software within the meaning of this License. The software is currently in the development stage.

Fraunhofer is willing to grant limited rights to use the software for scientific non-commercial research only; the use for other purposes is not allowed.

1

Definitions

»Field of Use« is defined as scientific non-commercial research limited to internal testing, evaluation and reproduction of the Software.

»Licensee« means the individual or legal entity exercising permissions granted by this License.

»Third Party Software « means any computer program provided by third parties as licensors and/or authors/right holders under their own license terms, including but not limited to open source software as defined by the Open Source Initiative (www.opensource.org). Third-party software used or included is listed in Annex B. If Fraunhofer software is listed as Third Party Software in Annex B, Fraunhofer shall also be deemed to be a third party and the software shall be deemed to be Third Party Software for the purposes of this License.

»Object Code« is the intermediate result of a compiler or translation process of the Source Code of the Software.

»Source Code« means the code of the Software in the version of the programming language(s) and is not subject of this License.

»Software« means the computer program made available by Fraunhofer in the Huggingface repository under »<u>https://huggingface.co/openGPT-X/Teuken-7B-instruct-v0.4</u>« and further described for information purposes only in **Annex A**.

2

Conclusion of this license agreement

The conclusion of this license agreement is a prerequisite for the granting of the rights of use in accordance with Section 3 below. Without the acceptance of these license conditions, the use of the Software or parts thereof is prohibited. By downloading the Software or parts thereof, the license conditions are deemed to have been accepted by the Licensee.

3 License

3.1

Subject to the terms and conditions of this License, the Licensee's acceptance of the terms of this License and the Licensee's compliance with the provisions of this License, Fraunhofer hereby grants the Licensee the worldwide, non-exclusive, non-sublicensable, non-transferable and royalty-free right, limited in terms of content to the Field of Use, to use the Software on Licensee's computers, i.e. to store and load it permanently or temporarily, to display it and to run it, even to the extent that duplications are necessary for this purpose. For avoidance of doubt, no rights of use for any commercial purposes are granted under this License.

3.2

The licensee is not entitled to modify the Software, including, but not limited to modifications made to the Software by the Licensee such as implementing new modules and functionalities.

3.3

Licensee shall not reproduce and distribute copies of the Software (neither in Source Code nor in Object Code form) on any medium.

3.4

No further rights of use or exploitation are granted to the Licensee. Fraunhofer shall retain all intellectual property rights, including software and know-how, unless expressly licensed hereunder. The Licensee agrees to refrain from any further use or commercialization of the Software not permitted by the license granted herein.

3.5

Fraunhofer does not grant any rights to Third Party Software to the Licensee, therefore the Licensee must independently ensure proper licensing under their respective applicable license terms. The Third Party Software may be copyrighted in favor of a third party or third parties, e.g., in favor of the authors indicated in the copyright notices included in the corresponding source files or other materials provided together with the Third Party Software, e.g., an open source software. **Annex B** contains the Third Party Software used by Fraunhofer together with the Software. Fraunhofer does not warrant or represent that Third Party Software is free of errors or claims or fit for a particular purpose. Before using the Third Party Software, the Licensee shall independently verify whether the use of the Third Party Software is permissible and suitable for its purposes. The Licensee undertakes not to use the Software or parts thereof in a way that would result in the Software or parts thereof being licensable under an open source software license. A right of use which allows the Licensee to make the Software or parts thereof available to third parties in its original or edited form as free software in the sense of open source is expressly not granted under this License.

4

Liability, Warranty

4.1

Except in cases of intentional and grossly negligent conduct, Fraunhofer, its legal representatives, trustees, officers and employees shall not be liable for direct or indirect, material or immaterial loss or damage of any kind arising from the License or the use of the Software; this applies, among other things, but not exclusively, to loss of goodwill, loss of production, computer failures or errors, loss of data or economic loss or damage, even if Fraunhofer has been notified of the possibility of such loss or damage.

4.2

Irrespective of clause 4.1, Fraunhofer shall only be liable within the scope of statutory product liability to the extent that the respective provisions are applicable to the Software.

4.3

The Licensee indemnifies Fraunhofer against any claims of third parties, including related costs such as reasonable lawyers' fees and court costs, asserted against Fraunhofer in connection with the Licensee's exercise of the license or due to a breach of the terms of this License by the Licensee.

5 Limited warranty

This License is granted free of charge and thus constitutes a gift. Accordingly, any warranty is excluded. The Software is a work in progress. The Software is not complete and may therefore contain errors ("bugs"), as is inherent in this type of development. Fraunhofer assumes no warranty for the usability, performance, or usability of the software

6 No Trademarks

This License does not grant permission to use the trade names, trademarks, service marks or product names of Fraunhofer.

7 Applicable Law, Plac

Applicable Law, Place of Jurisdiction

The laws of the Federal Republic of Germany apply exclusively to the exclusion of the conflict of law provisions and the United Nations Convention on Contracts for the International Sale of Goods (CISG). The courts of Munich are hereby agreed as place of jurisdiction for all disputes arising from or connected with the License.

Annexes

Annex A: Software Annex B: Third Party Software

Annex A - Software

Attribut	Beschreibung		
Bezeichnung	Teuken-7B-instruct-research-v0.4		
Modellfamilie	Teuken-chat		
Parameter	7 Milliarden		
Modelltyp	Transformer-basiert (nur Decoder)		
Sprachen	Bulgarisch, Tschechisch, Dänisch, Deutsch, Griechisch, Englisch, Spanisch, Estnisch, Finnisch, Französisch, Irisch, Kroatisch, Ungarisch, Italienisch, Litauisch, Lettisch, Maltesisch, Niederländisch, Polnisch, Portugiesisch, Rumänisch, Slowakisch, Slowenisch, Schwedisch		
Modellnutzung	Teuken-7B-base-v0.4 angepasst für Aufgaben der natürlichen Spracherzeugung in mehreren Sprachen innerhalb einer Konversation.		
Eingabe/Ausgabe	Eingabe: Natürlichsprachliche Aufgaben Ausgabe: Erzeugte Lösung der Aufgabe oder freundliche Ablehnung der Aufgabe		
Trainingsdaten	Über 600K Beispielkonversationen zwischen Nutzer und Modell		
Trainingszeitraum	Das Modell wurde im September 2024 für drei Tage trainiert		
Trainingsziel	Kausale Sprachmodellierung mit Fokus auf Modellausgaben in den Beispielkonversationen		
Trainings- Hyperparameter	AdamW-Optimizer, Training mit gemischter Präzision (bf16), kein linearer Bias, 32 Schichten		
GPU-Stunden	160 Stunden		
Trainings-Hardware	NVIDIA H100 GPUs		

Name	Version	URL	SPDX-Identifier
Jinja2	3.1.2	https://palletsprojects.com/p/jinja/	BSD-3-Clause
MarkupS afe	2.1.1	https://palletsprojects.com/p/mar kupsafe/	BSD-3-Clause
PyYAML	6	https://pypi.org/project/PyYAML/	MIT
filelock	3.6.0	<u>https://github.com/tox-dev/py-</u> <u>filelock</u>	Unlicense
huggingf ace-hub	0.20.1	https://github.com/huggingface/h uggingface_hub	Apache-2.0
numpy	1.26.2	https://numpy.org	BSD-3-Clause
packagin g	21,3	https://pypi.org/project/packaging {	
regex	2022.4.2 4	https://github.com/mrabarnett/mr ab-regex	Apache-2.0
requests	2.25.1	https://pypi.org/project/requests/	Apache-2.0
safetenso rs	0.4.1	https://github.com/huggingface/s afetensors	Apache-2.0
sentence piece	0.1.99	https://github.com/google/senten cepiece	Apache-2.0
sympy	1,9	https://sympy.org	BSD-3-Clause
tokenizer s	0.15.0	https://github.com/huggingface/t okenizers	Apache-2.0
torch	1.12.0	https://pytorch.org/	BSD-3-Clause
transfor mers	4.36.2	https://github.com/huggingface/t ransformers	Apache-2.0
typing_ex tensions	4.9.0	https://github.com/python/typing extensions	PSF-2.0
urllib3	1.26.9	https://urllib3.readthedocs.io/	MIT

Annex B - Third-Party Software

The following Third-Party Software is also included in the Huggingface repository according to clause 1 of this license agreement, however, Fraunhofer expressly points out that the following Third-Party Software is not licensed under this license agreement, but under MPL-2.0, where applicable.

certifi	2020.6.2 0	https://certifiio.readthedocs.io/en/ latest/	MPL-2.0
tqdm	4.66.5	https://github.com/tqdm/tqdm?ta b=License-1-ov-file#readme	MIT and MPL-2.0