|  |  |  |
| --- | --- | --- |
| ITU Logo | INTERNATIONAL TELECOMMUNICATION UNION**TELECOMMUNICATIONSTANDARDIZATION SECTOR**STUDY PERIOD 2017-2020 | FG-AI4H-A-008 |
| **ITU-T Focus Group on AI for Health** |
| **Original: English** |
| **WG(s):** | N/A | Geneva, 26-27 September 2018 |
| **DOCUMENT** |
| **Source:** | FG-AI4H management |
| **Title:** | Draft call for submissions (Data & Use Cases) on Artificial Intelligence for Health |
| **Purpose:** | Discussion |
| **Contact:** | Thomas WiegandFraunhofer HHI (Germany)Germany | Tel: +49 (30) 31002 617 Fax: +49 (30) 392 72 00 Email: thomas.wiegand@hhi.fraunhofer.de |

|  |  |
| --- | --- |
| **Abstract:** | This document contains the draft Call for submissions (Data & Use Cases) on Artificial Intelligence for Health as discussed by the FG-AI4H management in advance of the first FG-AI4H meeting. |

**Call for Submissions (Data & Use Cases) on Artificial Intelligence for Health**

# Objectives of the call

The ITU/WHO Focus Group on “Artificial Intelligence for Health” invites submissions of **data sets** that are related to representative **use cases** from the **health** domain. The data sets will serve for **benchmarking artificial intelligence** (AI) methods within a standardized assessment framework. Data sets are not limited to any modality (such as images, time series, laboratory tests, “omics”, text, electronic health records etc.) but a wide variety is welcome. Exemplary use cases may include AI-based diagnostics, treatment decision making, triage, patient self-management, risk assessment, image segmentation or annotation, early detection, among others. The standardized assessment of AI-for-health-solutions will ensure and prove the quality, help to create trust, foster the adoption in practice and have a strong impact on Global Health. More information on the benchmarking framework can be found in our whitepaper published on <https://arxiv.org/abs/1809.04797>.

# Advantages for submitters

Data owners contribute data in their own interest because:

* **Trust** in AI-based solutions for **your use case** will foster and speed up the adoption by health systems and users worldwide.
* You have the possibility to take a prominent role from the beginning in the creation of a benchmarking procedure for your use case/solution.
* Benchmarking reports produced by the framework will cite your data sets.
* You can shape an entire field together with two reputable agencies from the United Nations. While you need to share valuable data, you should not miss this opportunity – others will fill the gap!

# How to submit?

Submitters are asked to first send a description of the data set and of the targeted use case as PDF to the Focus Group Secretariat (tsbfgai4h@itu.int). Please help the Focus Group to understand data and use case and to decide about their suitability for the project. The descriptions (concise but with sufficient detail) may address the following topics and questions - if applicable:

* Specification of the use case
* Objectives and high-level description of the data acquisition
* Statement whether you can (or can not!) provide a detailed protocol that allows for reproducing the data acquisition. With the protocol, independent trusted institutions can acquire more secret validation data for the benchmarking framework. It is not required yet to include this protocol in the description.
* Would you be willing to help the focus group to record more data, in principle?
* Was informed, written consent obtained to acquisition, sharing and processing of (patient) data?
* Was data acquired in accordance with the declaration of Helsinki?
* How did you assure privacy/anonymization?
* The Focus Group will make a part of the data public as a training dataset. At the same time, some of the data may be kept secret by the focus group, as a testing dataset. Would you consent to keep this part of the data secret? What are your measures that guarantee secrecy?
* Who has had access to the data in the past, at present, in the future (e.g. published or plan to share with other researchers)?
* Can we use the data for benchmarking or can you think of any obstacles?
* Type of data (e.g. images, time series, laboratory tests, “omics”, text, electronic health records, *you name it* or combinations thereof)
* Type of output variables (such as ICD or ICHI codes, triage tags, pixel or voxel labels in a segmentation or annotation task…)
* Size of the data (file size, number of samples)
* Structure of the data (database type, file format and content, …)
* How can the data be loaded (special software required, data loader functions available for Python/C/Java/...)?
* Clearly declare any potential conflicts of interest.
* Please include contact details and relevant information about the submitter in the PDF and use a descriptive filename.

# Review process and next steps

The Focus Group will review the descriptions and will subsequently contact you for data upload.

# Deadline

Submissions are invited during the lifetime of the Focus Group from July 2018 - July 2020. Early contributions are obviously much more likely to be considered for inclusion in the benchmarking framework.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_