

## Call for Experts to the Project Resilience Data Working Group

Group: Project Resilience, Al for Good

Working Group: <u>Data</u>

Type of Experts:

• All and data commons architect

Data owners with domain knowledge

Developers with data processing and management (DPM) skills

Data security and privacy

Data standardization

**Types of Engagements:** Core team, Voluntary basis

**Duration of engagement:** March 2022 – December 2022 (estimated) **To express interest:** https://www.research.net/r/PRDWG220224

For more information: Contact: pr@ai-commons.org

#### Background:

The vision of Project Resilience, in the continuity of efforts towards Al Commons, is to create a public Al utility where a global community of innovators and thought leaders can enhance and utilize a collection of data and Al approaches to accelerate the United Nations sustainable development goals.

The scope of the Data Working Group (WG) is to:

- 1) Specify guidelines for data contributions to Project Resilience
- 2) Provide specifications for interoperable data sharing for AI/ML
- 3) Analyze case studies related to the creation and sharing of publicly available data/datasets

The Data WG is seeking volunteers to serve in its core team who will contribute by identifying, collecting, and sharing data for public use, provide guidelines and standardized models in a sustainable way for open data and support the chairman in the work of this WG.

Experts sought include the following: Al and data commons architect, data owners/scientists with domain knowledge, developers with data processing and management (DPM) skills, data security and privacy, and data standardization experts. All expressions of interest are to be submitted via <a href="https://www.research.net/r/PRDWG220224">https://www.research.net/r/PRDWG220224</a>.

#### **Experts needed:**

### 1. Al and data commons architect

# Areas of expertise:

- Expertise in design of data and AI commons
- Expertise in open data modelling and engineering
- Expertise in trusted data sharing and exchange
- Expertise in data ecosystem, lifecycle, and operation

#### Data responsibilities:

- Analyze data value chain, data types and characteristics
- Analyze requirements and data models for data sharing considering FAIR data principles
- Lead development of guidelines for data contribution to Project Resilience with all Data WG experts
- Lead development of specifications for interoperable data sharing for Al/ML with all Data WG experts

## 2. Data owners/scientists with domain knowledge

Areas of expertise:	Data responsibilities:
<ul> <li>Owners of existing data/data sets related to MVP</li> </ul>	Identify data contributors' roles

- candidate use cases
- Data scientists to review data/data sets to be references for benchmark and testing
- Domain knowledge in the areas of climate, water, energy.
- Review data and create model datasets
- Identify publicly available data/data sets
- Share experience with use cases, recommendations
- Contribute to the development of data requirements and guidelines

## 3. Developers with DPM skills

#### Areas of expertise:

- Expertise in data processing and management (DPM)
- Expertise in data engineering and usage
- Expertise in data analysis

#### Data responsibilities:

- Data collection, sampling and pre-processing (filtering, format conversion, etc.)
- Data processing (classification, curation, etc.)
- Data analysis (time-series, multi-modal, etc.)
- Convert collected data into publicly available data and frequently update
- Data storage and management
- Classify data features (context/action/outcomes)
- Provide data inputs to predictor and prescriptor models for the MVP platform according to data features

### 4. Data security and privacy (including governance) experts

#### Areas of expertise:

- Expertise in data security
- Expertise in data privacy
- Expertise in data governance including legal aspects

#### Data responsibilities:

- Develop guidelines for data security (access & usage control and policies, etc.)
- Develop guidelines for data privacy (privacy preserving approaches, etc.)
- Develop guidelines for trusted data (validate data quality with appropriate KPIs, transparency, traceability, etc.)
- Develop guidelines for risk management and data governance including data ownership
- Develop guidelines for legal compliance and ethics

#### 5. Data standardization experts

#### Areas of expertise:

- Expertise in ICT standardization
- Expertise in data models & format and interoperability
- Expertise in data standards
- Expertise in open source/data communities

#### Data responsibilities:

- Conduct a comprehensive survey of data standardization efforts in various SDOs
- Identify necessity of standards and available standards for open data
- Conduct gap analysis of existing data standards
- Identify new areas for future standardization to support open data
- Contribute to standardization based on data group's results