# CALL FOR PAPERS IN ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) is transforming the role of ICT in decision making through the use of data-driven models that can impact people in all walks of life. AI has the potential to solve some of the most pressing challenges that impact the country and drive growth & development in all core sectors like health care, agriculture ,manufacturing, apart from its role in various public service applications such as financial services, education urban development.

As AI proliferates and AI find more and more use cases for practical implementation, there is a need for evolving standard Indian AI stack which will improve trustworthiness levels, bring interoperability, protect digital rights and evolve ethical standards in AI. The basic foundation block for AI, will identify it as an open infrastructure that unbundles identity, signature, money exchange, document and data exchange allowing development of various apps and solutions. This can help in developing pigeon holes for security; trustworthiness; digital rights and ethical standards etc that Indian industry can exploit and develop India specific AI apps or for the world in general. All across the world standardisation organizations are working to create AI standards; thus it is the right time of developing standard Indian AI stack.

A committee on standardisation in AI technologies has been formed by the Department of Telecommunications, Ministry of Communications to develop necessary AI standards. The scope of the committee will be mainly to identify the gaps and challenges towards developing the standards in different areas of AI; develop these AI standards with India specific requirements and formulate the framework for AI Indian stack.

Accordingly the committee invites original papers addressing different aspects of AI-  i.e. the functional network architectures; AI architecture; data structures required; the type of interfaces and protocols; Technologies employed; Systems deployed; Trustworthiness; Interoperability Standards; Digital rights and Ethical standards in AI; Preserving algorithm openness;

technological mapping and leveraging AI for national missions and any other aspects.

There are five working groups working towards standardisation of AI framework.

- **Working Group-1**- Standardisation of the functional network architectures; AI architecture; data structures.

- **Working Group-2**- Standardisation of the type of interfaces and protocols; Technologies employed; Systems deployed; Benchmarking practices.

- **Working Group-3**- Standardisation in Trustworthiness; digital rights and ethical standards in AI; preserving algorithm openness; Security and compliance aspects.

- **Working Group-4**- Standardisation in Interoperability Standards; technological mapping and leveraging AI for national missions.

- **Working Group-5-** Development of Indian AI Stack.

Papers are invited from various stakeholders including Academia, Research and Technical industries, Telecom service providers, Application service providers, etc. on any of the above areas of AI. The technical program of this development will include a Research Track, a Work-in-Progress Track, and a number of workshops.

**Manuscript Guidelines and Submission Information**

- Please download the paper template in WORD. (Details in Annexure-A)

- All submitted manuscripts will be peer-reviewed by at least 3 committee members. Accepted papers will be intimated by email and will have to be presented at the workshop/conferences.

- The submitted manuscripts should not be more than 40 pages and should be in Bookman Old Style with font 12pt.

- The text should be in single-column format.

- Keep the layout of the text as simple as possible.

- Do use bold face, italics, subscripts, superscripts etc.

- When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns.

- All figures and tables should be embedded in the text to facilitate reviewing. Please also supply the source files of figures, tables and text graphics

## Important Dates

Paper Submission Due Date: 25th November 2019

Decision Notification (email): 09th December 2019

## Submission Link

All papers will have to be submitted to: ddgadmnap-dot@gov.in & diradmnap-dot@gov.in

## About TEC, DOT

TEC is a Standard Setting Organization and is an attached office under Department of Telecom, Government of India. Its main function includes:

- Prepare Standards, Specifications in the form of Generic Requirements (GRs), Interface Requirements (IRs) and Service Requirements (SR) etc. for telecom and related ICT sector.
- Issuing Interface Approvals, Certificate of Approvals, Service Approvals & Type Approvals.
- Formulation of Technical Regulations and certification of equipment, network and services in the sector.
- Cross-sector standardization related to ICT domain.
- National Enquiry Point for WTO Technical Barrier to Trade (TBT) Agreement for telecom and related ICT sector.
- Formulation of Standards and Fundamental Technical Plans.
- Interact with multilateral agencies like APT, ETSI, IEEE and ITU etc. for standardisation.
- Develop expertise to imbibe the latest technologies and results of R&D.
- Provide technical support to DoT and technical advice to TRAI & TDSAT.
- Coordinate with C-DOT on the technological developments in the Telecom Sector for policy planning by DoT.

## Contact Information

If you have any questions or queries on this "Call for Papers", please send email to: adgtermap.dot@nic.in.

**Sections and Sub-sections in the manuscript submitted:**

The paper should contain following sections and sub sections:

*Title*

Essential, Concise and informative.

Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.

*Author names and affiliations*

Please clearly indicate the given First Name, Middle Name (if any), Last Name (if any) in sequence of each author and check that all names are accurately spelled. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lowercase superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and the e-mail address of each author.

*Corresponding author*

Clearly indicate who will handle correspondence at all stages. This responsibility includes answering any future queries about Methodology and Materials. Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.

*Abstract*

A concise and factual abstract is required. The abstract should state briefly the purpose of the paper, the principal analysis and major conclusions. An abstract is to be presented separately from the article. References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

*Keywords*

Immediately after the abstract, provide a maximum of 10 keywords, avoiding general and plural terms and multiple concepts (avoid, for example, "and", "of"). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

*Abbreviations*

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article

*Subdivision - numbered sections*

Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

*Introduction*

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

*Material and methods*

Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described.

*Theory/calculation*

A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis.

*Results*

Results should be clear and concise.

*Discussion*

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

*Conclusions*

The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

*Appendices*

If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly, for tables and figures: Table A.1; Fig. A.1, etc.

*Acknowledgements*

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

*References and Reference Style*

All references are to be listed at the end of the paper in alphabetical order under the first author's name and numbered consecutively by Arabic numbers. Chronological order is used if there is more than one publication by the same author or team of authors.

There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/ book title, chapter title/article title, year of publication, volume number/book chapter and the article number or pagination must be present.

**Use of Figures and Tables in Paper**

*Figure captions*

Ensure that each illustration has a caption. Supply captions separately, not attached to the figure. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

*Tables*

Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body.

*Citation in text*

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list. If these references are included in the reference list they should follow the standard reference style of the journal.

**Submission checklist**

1. You can use this list to carry out a final check of your submission.
2. Please check the relevant section in this Guide for Authors for more details.
3. Ensure that the following items are present:
    i. One author has been designated as the corresponding author with contact details:
        - E-mail address
        - Full postal address
    ii. All necessary files have been uploaded.
    iii. Manuscript:
        - Include keywords
        - All figures (include relevant captions)
        - All tables (including titles, description, footnotes)
        - Ensure all figure and table citations in the text match the files provided
        - Indicate clearly if color should be used for any figures in print Graphical Abstracts / Highlights files (where applicable)
        - Supplemental files (where applicable)
    iv. Further considerations:
        - Manuscript has been 'spell checked' and 'grammar checked'
        - All references mentioned in the Reference List are cited in the text, and vice versa
        - Permission has been obtained for use of copyrighted material from other sources (including the Internet)
        - Policies detailed in this guide have been reviewed.