

# IIT PATNA VISHLESAN I-HUB FOUNDATION

## Call for Innovative and Entrepreneurial Project Proposals Under

### Technology Innovation Hub (TIH) of National Mission on Interdisciplinary Cyber Physical Systems (NMICPS) for Speech, Video and Text Analytics Technologies

#### Preamble

The multidisciplinary Vishlesan I-Hub Foundation at IIT Patna under Technology Innovation Hub (TIH) targets to leverage Research and Engineering capabilities of Sustainable Development Goals and achieves the mandate of National Mission on Interdisciplinary Cyber Physical Systems. The Vishlesan I-Hub Foundation at IIT Patna promotes the progression of Technology Readiness Level (TRL) for development of indigenous system mainly in the broad areas of “Speech, Video and Text Analytics” in the following application domains:

*Health, Education, Tourism, Judiciary, Railways, Border Management, Security, Environment, Forest and Climate Change, Road Transport, Housing and Urban Affairs, and Electronics and IT.*

The Vishlesan I-Hub at IIT Patna also encourages to leverage the other related areas for technology development, innovation, professional education, entrepreneurship, brand building, technology commercialization and product management for the dissemination and deployment of intellectual property; and for public outreach. At IIT Patna, Vishlesan I-Hub under TIH acts as a Section 8 Company to spearhead the activities in “Speech, Video and Text Analytics Technologies” and other related areas under TIH.

#### Proposal Call

Vishlesan I-Hub Foundation at IIT at IIT Patna under Technology Innovation Hub (TIH) of National Mission on Interdisciplinary Cyber Physical Systems (NMICPS) is inviting project proposals for the multi-disciplinary program on **Speech, Video and Text Analytics (SVTA)**. A critical aspect is that the project proposals should formulate methodologies (**above TRL 5**) for (i). concrete development of technologies, products, IPRs, as well as research bases and (ii). Entrepreneurship Development, including Start-ups and Spin-off companies, along with significant employment generation, techno-commercial incubation and innovation acceleration.

**Project Format:**

**Call for Innovative and Entrepreneurial Project Proposals  
Under  
Technology Innovation Hub (TIH) of National Mission on Interdisciplinary Cyber  
Physical Systems (NMICPS) for  
for  
Speech, Video and Text Analytics Technologies  
FOR FY 2021-22**

Project Ref No. \_\_\_\_\_  
(to be given by office)

1. **Title of the Project:**
2. **Theme (mention the domains as mentioned in the advertisement)**
3. **Project Category:** Category A /Category B (Pl. refer Pt 20)
- 3.b **Proposed Duration of the Project:** \_\_\_\_\_ **Months**

4a . **Principal Investigator (PI)**

Name	
Designation	
Department	
Institution	
Postal Address	
E-mail	
Date of Birth :	

4b. **Co-Principal Investigator (Co-PIs)**

Name	
Designation	
Department	
Institution	
Postal Address	
E-mail	
Date of Birth :	

4c. **Industry Collaboration** (*mention the name of industry with specific support in the form of cash and/or in-kind. Attach the industry support letter in the specific format as mentioned in Annexure-1*)

**5. Ongoing / Completed Projects with the Principal Investigator :**

S. No.	Project Title	Sponsoring Agency	Budget Rs (approx)	Status
1				
2				
3				

6. **Context/Background** (250 words) [Please elaborate how the proposal will fit into the Speech, Video and Text Analytics?]

7. **Problems to be addressed** (1500 words) [In view of the international and national state-of-the-art]

8. **Aims and Objectives** (500 words) [List in bulleted items. While listing, mention how is the proposal aligned towards building the target competency/capabilities of the TIH for Speech, Video and Text Analytics? ]

9. **Novelty of the Project** (250 words) [ Mention how is the proposal novel with respect to the current state-of-the-art?]

10. **Strategy** (500) [What is the competitive advantage of the proposed technology over other alternatives?]

11. **Target beneficiaries** (500 words) [Elaborate on your proposed research objectives societal impact, national-level consequences. Name the companies who may be interested. Also mention the industry collaborator]

12. **Technology & Research Methodology** [This section should elaborate on the technology choices, if any; evaluation of the technology options, as well as the basis for the choice of technology for the proposed project] (1000 words)

13. **Time Schedule of activities giving milestones**

14. **Suggested Plan of action for utilization of research outcome expected from the project.**  
(Maximum 1 page)

**15. Deliverables:**

15.a: **Publications, Technologies, products, IPRs**

15.b: **Any other Research output**

15.c: **Entrepreneurship Development/ techno-commercial incubation**

15.d: **Start-ups and Spin-off companies**

15.e: **Employment generation**

**16. Cost Benefit Analysis** [Mention how your technology will benefit the application domain/users with respect to what exists at present. Also state the sustainability plan, i.e. how commercialization will be done, and revenue will be generated in the next 3 years after the completion of the project] (Maximum 1 page)

**17. Budget:**

Item		Budget (Lakhs)			Total (in Rupees)
		1st Year	2nd Year	3rd Year	
A	<b>Recurring</b>				
	1.Salaries/wages				
	Designation & Monthly number of persons Emoluments				
	2. Consumables				
	3. Travel				
	4. Contingency				
	5. Other costs:				
B	<b>Equipment (minor computational resources)</b>				
		Insert more rows if required			
C	<b>Total (A+B)</b>				
D	<b>Overhead (10%)</b>				
E	<b>Grand Total (A+B+C+D)</b>				
F	<b>Industry Support- Attach the support letter (Annexure)</b>				
G	<b>Fund Requested from the TIH</b>				

## 18. Expertise:

**18.1 Expertise available with the investigators in executing the project:**(Maximum 1 page)  
(Professional expertise existing with each of the investigators in terms of publications, Patents and preliminary results, to execute every component of the proposal should be highlighted)

**18.2 Key publications of the Investigators pertaining to the theme of the proposal and TIH during the last 10 years**

**18.3 Infrastructural Facilities available with the investigator**

**18.4 Equipment available with the Institute/ Group/ Department/ for the project:** (Related to this project)

**19. Endorsement letter from the PI and Co-PIs Institute** (PL. use DST/SERB format)

## 20. Duration:

Category A	One year (upto <b>20 lakhs</b> ) The project may be considered for extension for second year with additional fund
Category B	Two years (upto <b>30 lakhs</b> ) The project may be considered for extension for the third year with additional fund

## Eligibility:

Applicants [Principal Investigator (PI) and Co-Principal Investigator(s) (Co-PI(s))] should be Indian citizens. Foreign nationals (including OCI and NRI) are also eligible to apply provided they fulfil the eligibility criteria notified by SERB (SERB Funding Guidelines for foreign nationals dated 27th Oct 2016).

The applicant(s) must hold a regular academic/research position in a recognized academic institution or national laboratory or any other recognized R&D institution in India.

**Industry participation is mandatory. The quantum of funding will commensurate with the industry contribution. Some of the other responsibilities of industry partner include but are not limited to: Productization, Commercialization and IPR.**

The program is maximum for three years with deliverable from 1<sup>st</sup> year onwards. The investigators may be permitted to use the facility of IIT Patna as per the Institute terms and conditions.

The project should be submitted in the format as provided on or before April 30, 2021 in softcopy to [vishleshan-i-hub-foundation@iitp.ac.in](mailto:vishleshan-i-hub-foundation@iitp.ac.in) followed by the hard copy to R&D IIT Patna, Patna, Bihta, Bihar-801103. Please mention the subject line “*Proposal for VISHLESAN I-HUB FOUNDATION*”

**Annexure-1**  
**CONSENT LETTER FROM INDUSTRY PARTNER**

*(On official letter head)*

This is to state that ..... (Name of Industry/Organization) hereby consent to partner with IIT Patna Vishlesan I-Hub Foundation in the proposed NM-ICPS Technology Innovation Hub (TIH) in Speech, Video and Text Analytics. I am aware and agree with the activities mentioned in the proposal under Industry Partnership.

I hereby consent to support the TIH / SAH in terms of:

1. Contribution in Cash: ..... (Rs in Lakh)
2. Contribution in Kind: ..... (List activities)

Summary profile of the Industry is given below:

Name of Industry/Organization :  
Nature of Business :  
Number of Employees :  
Annual Turnover :

I hereby affirm that my Industry/Organization is committed to participating in the proposed TIH as indicated in the proposal including the financial liabilities as provided above.

Date  
Place

Head of Industry/Organization  
Seal