MEMORANDUM OF UNDERSTANDING

BETWEEN



National Institute of Technology Agartala

AND



National Institute of Technology Srinagar Hazratbal, Srinagar Jammu and Kashmir, 190006

COLLABORATION ON RESEARCH AND DEVEOPMENT, FACULTY AND STUDENT EXCHANGE

Joint Research proposal in the Design Prototype and Production of H/W and S/W for sustainable agriculture, AI based agriculture, Agri-robotics, water quality monitoring and conservation and etc.

Major Area: Computer Science and Engineering, **Artificial Intelligence, Image intelligence and Robotics**

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MoU) is executed at	on this	day of
2023, "(hereinafter referred to as the Effective Date)	"between	

The **National Institute of Technology Srinagar** (**J&K**), a Centrally Funded Technical Institute, established under National Institutes of Technology Act, 2007, having Educational Campus & Administrative Offices at Hazratbal, Srinagar, J&K 190006 (hereinafter referred to as the **NIT Srinagar**) & acting through its **Director** as its "**Signing Authority**", which expression shall, unless excluded by or repugnant to the context be deemed include its successors-in-interest and assigns).

and

The **National Institute of Technology Agartala**, located at Jirania, Agartala (NIT Agartala, hereafter), Tripua, 799046 (hereinafter referred to as the **NIT Srinagar**) & acting through its **Director** as its "**Signing Authority**", which expression shall, unless excluded by or repugnant to the context be deemed include its successors-in-interest and assigns).

WHEREAS,

NIT Srinagar and NIT Agartala are premier academic institutions engaged in research and development activities in various fields, including engineering, technology, and agriculture.

NIT Srinagar and NIT Agartala recognize the importance of collaboration and cooperation in advancing research and development in the field of sustainable agriculture, AI-based agriculture, water quality monitoring, and conservation.

NIT Srinagar and NIT Agartala are willing to collaborate on a joint research project titled "Design Prototype and Production of items for sustainable agriculture, AI based agriculture (Agri-robotics), water quality monitoring and conservation".

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants contained herein, the parties agree as follows:

1. SCOPE OF COLLABORATION

The principal technical area of collaboration between NIT Srinagar and NIT Agartala will be in the domain of Robotics in Agriculture, Water body health monitoring and conservation to deploy cyber-physical systems for, but not limited to,

 Health monitoring of large water bodies and eco system like Dal Lake, Srinagar different lakes at Agartala.

- Water/industry discharge assessment, monitoring and reporting for proper management.
- Advancement of land resources and farm preparation,
- Agriculture automation and precision farming,
- Harvesting and post-harvesting with application of Artificial Intelligence and robotics,
- Agribusiness marketplace,
- The application of the Internet of Things (IoT) systems in the domain of Agriculture & Water.
- Co-operation in areas of research, education, policy inputs and outreach for the development and dissemination of efficient technologies for sustainable use and rejuvenation of natural resources in agriculture with application of automation and robotics.

The bilateral collaboration would capitalize on the complementary strengths of NIT Srinagar and NIT Agartala in engineering, agriculture and regulatory matters, respectively, to achieve the goal of technological innovation in the domain of Agriculture and Water Conservation through the Research Project.

2. RESPONSIBILITIES OF THE PARTIES

2.1 NIT Srinagar agrees to:

- Provide access to its research facilities, laboratories, and equipment.
- Assign qualified faculty and staff to participate in the joint research project.
- Share research data and findings with NIT Agartala pertaining to the project.
- Participate in joint workshops, seminars, and conferences on the Research Area.
- Assist NIT Agartala in the dissemination of research findings.
- Joint Ph.D. supervision, publications and exchange of research.

2.2 NIT Agartala agrees to:

- Provide access to its research facilities, laboratories, and equipment.
- Assign qualified faculty and staff to participate in the joint research project.
- Share research data and findings with NIT Srinagar pertaining to the project.
- Participate in joint workshops, seminars, and conferences pertaining to the project.
- Assist NIT Srinagar in the dissemination of research findings.
- Joint Ph.D. supervision, publications and exchange of research.

3. CONFIDENTIALITY

a. Individual faculty involved in joint collaboration for research and development at NIT Srinagar and NIT Agartala agree to hold in confidence all information/data designated by the parties as being

confidential which is obtained from either party or created during the performance of the MoU and will not disclose the same to any third party without written consent of the other party.

b. The above confidential clause under this MoU excludes information/data possessed by either party before entering into this MoU or independently developed and/or information already available through the public domain, or information which is required to be disclosed by any law or disclosure of such information is directed by a court, tribunal or any competent authority.

4. TERM AND TERMINATIONS

- a. The collaboration will be coordinated by designated persons from the two Institutions. For all issues related to finances, manpower, space and other infrastructure relevant to the collaboration, the designated individuals from both institutes would obtain necessary approvals and sanctions.
- c. This MoU shall be valid for **five (05) years** unless extended by mutual consent of both the Parties. A Party willing to extend the MoU shall give written notice of its intention to extend, at least 60 days prior to the expiry of this MoU, which may be accepted by the other Party within a period of 30 days from the receipt of such notice.
- d. This MoU may be amended or terminated by mutual written agreement of the parties at any time.
- e. Either party shall have the right to terminate this MoU with 60 days prior written notice to the other party.
- f. The termination of the MoU whether mutual or unilateral, shall not affect the obligations of the participant under any Research Agreement. The confidentiality clause obligation as referenced in clause 5 shall survive such termination.

5. MISCELLANEOUS

- a. All intellectual properties including any patent, copyright, design, etc. (hereinafter referred to as the "IPs") which a redeveloped jointly or which arise out of activities undertaken jointly by the Parties under this Agreement will be owned based on the extent of the contribution made by each party (hereinafter referred to as "Joint IP"). In respect of joint IPs, applications can be filed for protection by joint consent only, and the expense incurred on patent filing will be borne by all parties.
- b. Sharing of authorship in publications arising out of or in connection with joint activities shall be in accordance with the irrespective contributions to the publication.
- c. The signed MoU signifies only a strong intent and commitment towards the goals specified in the document. Both institutes will have to follow all the rules/regulations and obtain appropriate sanctions for implementing all the joint activities.

6. COORDINATION COMMITTEE

The following will constitute the Coordination Committee to execute, monitor and review the collaborative program between NIT Srinagar and NIT Agartala:

- a) Dean (Research & Consultancy), NIT Srinagar or nominee(s)
- b) Dean (Research & Consultancy), NIT Agartala or nominee(s)
- c) Chairman IICe and Startup/ Associate Dean, NIT Agartala or nominee(s)
- d) Dr. Ranjeet Kumar Rout, Assistant Professor, CSE NIT Srinagar

7. CONFIDENTIALITY & USE OF INSTITUTE NAME/LOGO/EMBLEM

A. Both institutions agree and undertake to keep confidential at all times information and/or data that may be exchanged, acquired and/or shared in connection with the area of cooperation, as mentioned above, unless otherwise the same information already exists in the public domain. The Parties will not use the information for the purpose other than that specified in this MoU without the prior written consent of the other Party.

Confidential Information includes all communication of information/ideas disclosed/derived in documentary or tangible form between the Parties, including oral, written and machine-readable form. In the case of such information disclosed orally or visually, the Disclosing Party shall confirm in writing the fact and general nature of each disclosure within (30) days after it is made. The Party disclosing the Confidential Information shall be referred to as the Disclosing Party. The Party receiving the Confidential Information shall be referred to as the Receiving Party.

B. The use of the name, logo and/or official emblem of any of the Institutions as the case may be, on any publication, document and/or paper is prohibited without the prior written approval of either Institution.

8. FINANCIAL OBLIGATION

This Memorandum of Understanding will not give rise to any financial obligation by one institution to the other. Each institution will bear its own cost and expenses in relation to the activities under this Memorandum of Understanding. There shall be no financial commitment on the part of both the parties. In case there arises any financial consideration, it will be dealt separately as per respective regulatory norms.

9. RESOLUTION OF DISPUTE

Any dispute between the parties arising in connection with the performance of this MoU shall be resolved amicably between the parties through a process of negotiation by the representatives of both the parties.

In case the dispute is not resolved, then it shall be referred to and be resolved through final and binding arbitration. Any decision reached by the Arbitrator shall be final and binding. The Director, NIT Srinagar, shall act as the Arbitrator for this purpose.

Arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and Rules made thereunder, or any legislative amendment or modification made thereto. The venue of the arbitration shall be Srinagar. The Award given by the Arbitrator shall be final and binding on the Parties. The language of Arbitration shall be English. The common cost of the Arbitration proceedings shall initially be borne equally by the Parties and finally by the Party against whom the Award is passed. Any other costs or expenses incurred by a Party in relation to the Arbitration proceedings shall ultimately be borne by the Party, as the Arbitrator may decide.

10. JURISDICTION

This MoU will be governed by laws of India only and courts in Srinagar only shall have exclusive jurisdiction to try entertaining and deciding the disputes arising in respect of this MoU, which is beyond the scope of arbitration.

11. SIGNED IN DUPLICATE

This MoU is executed in duplicate with each copy being an official version and having equal legal validity. By signing below, the parties, acting by their duly authorized officers, have caused this Memorandum of Understanding (MoU) to be executed, effective as of the day and year first above written.

In witness whereof, the parties to this MoU through their duly authorized representatives have executed this MoU on the days and dates set out below/above, and certify that they have read, understood, and agreed to the terms and conditions of this MoU as set forth herein.

The Parties he	ereto have caused this M	oU to be signed	in their respective	e names on this .	
day of	2023.				
So Agreed,					

Signed for and on behalf of: Signed for and on behalf of: **National Institute of Technology Srinagar National Institute of Technology Agartala** Director Director National Institute of Technology Srinagar National Institute of Technology Agartala **Prof. Manish Paul** Professor, Department of Civil Engineering and Chairman AA and IR, National Institute of Technology Agartala Key Contact Person and witness from NIT Agartala Key Contact Person and witness from NIT Srinagar: Dr. Suman Deb Name: Dr. Ranjeet Kumar Rout Chairman IICe and Startup Designation: Assistant Professor, CSE HOD, Department of Computer Science and NIT Srinagar Engineering,

FOR NIT SRINAGAR FOR NIT AGARTALA

National Institute of Technology Agartala