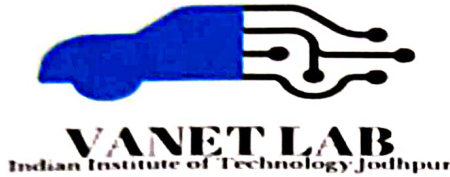




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Dr. Debasis Das
Head Computer Center
Co-Ordinator IDRIP IoT and Applications
Co-Ordinator VANET's Lab



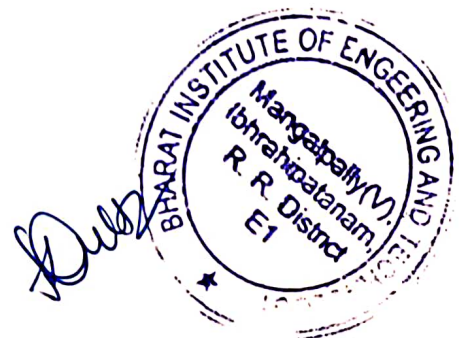
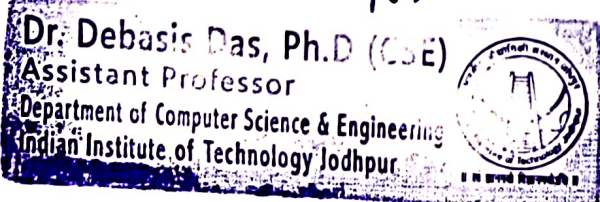
BHARAT
Institute of Engineering and Technology
NAAC Accredited; NBA Accredited for UG Programmes: CSE, ECE,
Approved by AICTE, New Delhi; Affiliated to JNTUH

Memorandum of Understanding

This Memorandum of Understanding (MoU) is entered on 3-11-2023 Between VANET LAB, IIT Jodhpur established in (June 2019) by IIT Jodhpur as an Implementation partner of Smart transportation. This laboratory is equipped with licensed EXata Network Emulator Software, Duckiebots Setup, Implementation of Real-Time Vehicular Networks Testbed (using OBU & RSU) and open sources software such as ns2/ns3 and OmNet ++ among many others. The students also get hands-on with experiments using Network Hardware (i.e., IoT devices, Raspberry Pi, Routers, Switches, Firewalls, PCs, Servers, Laptops, Sensors, and Arduino) which help to monitor network usage, bandwidth, throughput, delay and security attacks.

BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY, HYDERABAD a Technical Institute incorporated under Chinta Reddy Madhusudhan Reddy Educational Society, approved by AICTE(New Delhi) and affiliated to Jawaharlal Nehru Technological University, Hyderabad having its registered office at Mangalpally, Ibrahimpatnam, Hyderabad Telangana (hereinafter referred to as BIET, which expression shall unless repugnant to the context or meaning thereof, be deemed to include its successors and permitted) party of the Second Part;

BIET and VANET LAB-IIT Jodhpur shall be individually known as a Party and collectively as Parties.



VANET Lab @ IIT Jodhpur is equipped with licensed EXata Network Emulator Software, Duckiebots Setup, Implementation of Real-Time Vehicular Networks Testbed (using OBU & RSU) and open sources software such as ns2/ns3 and OmNet ++ among many others. The students also get hands-on with experiments using Network Hardware (i.e., IoT devices, Raspberry Pi, Routers, Switches, Firewalls, PCs, Servers, Laptops, Sensors, and Arduino) which help to monitor network usage, bandwidth, throughput, delay and security attacks. Tinkering Lab is a facility where students, researchers, and industry professionals work together to develop and test various intelligent transportation systems and networking devices. This lab is equipped with a wide range of hardware products that enable users to create and test their projects. In this document, we list all the hardware products available in the Tinkering Lab and provide details of their working.

Bharat Institute of Engineering & Technology (BIET), established in 2001 by Chinta Reddy Madhusudhan Reddy Educational Society (CRMER) under the leadership of Sri Ch. Venugopal Reddy, an eminent educationist with a social conscience and commitment. It has grown in its size and stature over the years, from an initial intake of 240 to 2200 students. BIET is one of the largest Engineering Colleges in Telangana. It offers 10 B.Tech programs, 9 M.Tech programs and 1 MBA program. Bharat Institute of Engineering & Technology (BIET) is NAAC Accredited and NBA Accredited for CSE,ECE institution with well experienced and highly qualified faculty, State-of- the-art Infrastructure, regular placements and well equipped laboratories.

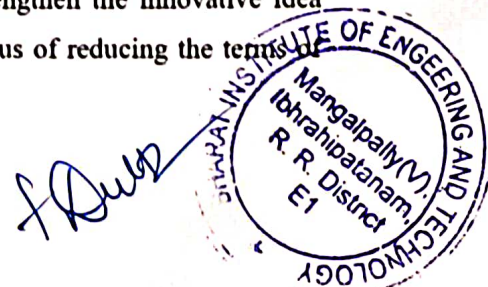
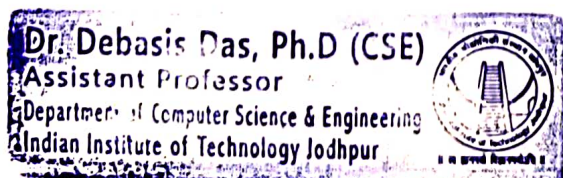
VANET LAB at IIT Jodhpur located at Jodhpur, Rajasthan- 342030, India AND **BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY** is located at Mangalpally (V), Ibrahimpatnam (M), Ranga Reddy (D), Hyderabad-501 510, Telangana, are entering into a Memorandum of Understanding to jointly work towards help and promote research through specific innovation & immersion programs and other knowledge exchange , Faculty exchange and student exchange programs related to technical field.

This MoU is being entered into by the two parties to set forth the terms and understandings to achieve the purpose as detailed below.

1. Purpose and scope of the MoU

The Purpose and scope of the MoU is

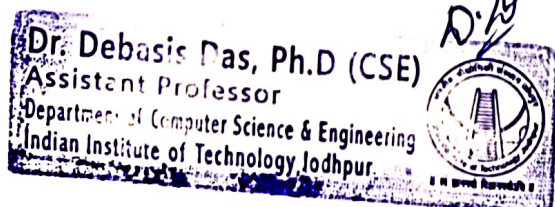
- (a) VANET LAB (IIT Jodhpur) to work with BIET to help researchers , students and Faculties looking for innovation in this domain.
- (b) This MoU is a statement of intent to collaborate and facilitate exchange of knowledge and capabilities of the immersion fellows and student innovators to achieve the objective of generating ground level information which is sufficient to strengthen the innovative idea towards developing a product or service. The Parties are desirous of reducing the terms of



their proposed collaboration in writing and this MoU sets out the understanding of the Parties' collaboration.

2. Roles & Responsibilities of the Parties

1. To Share experience and insights with each other to run the respective organizations towards leveraging each other's connections and contacts to enable students research, paper publication and research project proposal.
2. During the period of agreement, by mutual consent both Parties agree to explore, organize, manage and conduct programs/projects/events/bootcamps/workshops /trainings/visits, etc. for the benefit and advancement of research and innovations in line with their common missions based on mutually agreed upon themes, location and other considerations to be decided on a case-by-case basis.
3. Both Parties agree to direct relevant opportunities to the partners that arise during their respective operations. They may also on mutually agreed basis conduct the scouting and outreach exercises jointly to ensure economy and efficiency of such exercises.
4. Both Parties will at the request of the other party nominate a person/persons with relevant expertise to be a member of the selection Panel/committee constituted by the requesting party for selection of deserving candidates for the requesting party's programs. In any such case, the requesting party will set/approve the selection criteria for the panel/committee to select the candidate as per their respective mandates.
5. Both Parties agree to share their intangible and ecosystem resources including but not limited to database, list and networks of Ecosystem players like Mentors, Incubators, Investors, Accelerators, Facilitators, Technological Experts, Academic and Research experts, Aggregators, Advisory groups, Corporate and Non-Corporate partners and alike. Any such database, list and networks will be shared only with consent of any third party involved where need for such consent is pertinent.
6. Both Parties agree to, at request of other partners, share among its network and database information, publicity material, call for application/registration/participation, etc of any program, event for service of requesting partners.
7. Both Parties consent to the use of their name by the other party as their partner through pitch materials, website, social media, media mentions and other similar channels on mutual consent.
8. During the course of its normal operations, as and when both Parties have an opportunity, they will promote the name and work of the other party through pitch materials, website, social media, media mentions and other similar channels.
9. Both Parties agree that the relationship between them is on a pro bono basis and does not in any manner constitute a contract for service.



3. Funding

Unless otherwise specifically agreed to in writing by the Parties, each Party will bear on their own the respective costs of carrying out the obligations as defined under this MoU. In the event of any consequential financial obligations arising out of any initiative of the parties under this MoU, the parties would take appropriate decisions by mutual discussion and understanding through separate document(s) on a case to case basis. In that case, taxes if any will be charged extra and withholding tax if any will be deducted by the respective party on any financial transaction as per applicable laws.

4. Nature of MoU

This MoU is not a legally binding document and serves only as a guideline of the terms of engagement mutually agreed to between the said partners. The said MoU shall in no form be legally enforceable and has no binding on either party/ partner involved in the same.

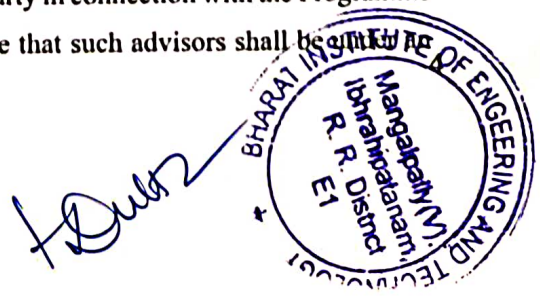
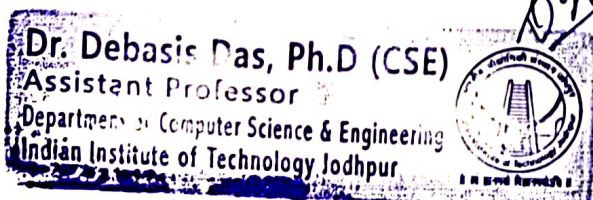
5. INTELLECTUAL PROPERTY, INVENTIONS AND INNOVATIONS

- 5.1. All intellectual property held by either Party to this MoU, prior to entering into this MoU or disclosed or introduced in connection with this MoU and all materials in which such intellectual property is held, disclosed or introduced shall remain the property of the Party introducing or disclosing it.
- 5.2. All Programme materials that are created, developed by the Parties jointly for the purpose of this MoU shall be owned jointly by both the Parties. Neither of the Parties, shall, while using the Programme Materials in future, represent or declare that the Programme Materials were solely created by it.
- 5.3. Nothing in this MoU shall be construed as a license or transfer or an obligation to enter into any further agreement with respect to any intellectual property currently licensed to or belonging to either Party.

6. REPRESENTATION TO THE PUBLIC AND CONFIDENTIALITY

- 6.1. Neither of the Parties shall use the name or logo of the other for any purpose whether in relation to any advertisement or other form of publicity without obtaining the prior written consent of the other Party.
- 6.2. None of the terms or provisions of this MoU shall be disclosed by either Party without the prior written approval of the other Party, to any person other than to:

6.2.0. The Party's advisors for purposes of assisting such Party in connection with the Programme (provided that the disclosing Party shall ensure that such advisors shall be signatory to the



obligation not to disclose the same to any other person)

6.2.1. As required for their internal and external reporting for statutory purposes or for funding organizations.

6.2.2. Unless required by any applicable laws and rules to which the disclosing Party may be subject.

6.2.3. Notwithstanding the generality of the above, the Parties may notify third parties of the fact that this MoU is in effect.

6.3. All information furnished in relation to this MoU by one Party to the other, which is clearly identified as proprietary, sensitive or confidential at the time of disclosure, will be kept confidential by the receiving Party, and will not be disclosed to any third party otherwise than to carry out the provisions of this MoU, unless such disclosure has been agreed in writing between the Parties.

6.4. The provisions of this section will not apply to any information in the public domain; information in the possession of the receiving Party prior to the disclosure of the information; information which is independently developed by the receiving Party; information required to be released by law; and information which is rightfully received by receiving Party from third parties without any breach of confidentiality obligations.

6.5. This section will survive the expiration or termination of this MoU for one (1) year from the date of expiration or termination of this MoU.

7. AMENDMENTS

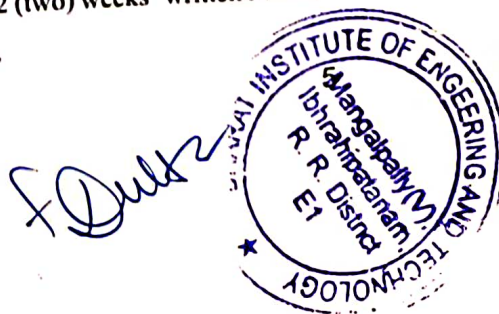
7.1. This MoU may be amended and supplemented in writing at any time as decided and agreed by mutual written consent of the Parties.

8. TERM AND TERMINATION OF MoU

8.1. This MoU shall commence on the Effective Date and shall remain in force for a period of **three (3) years**. After the expiry of the Term, this MoU shall stand terminated. Both the Parties may enter into similar MOU/Understanding for future collaborations. If either of the Parties wishes to terminate this MOU, the same may be done by way of 30 days' notice.

8.2. Either Party may at any time during the MoU term, by way of 2 (two) weeks' written notice, intimate to the other party, its intent of terminating this MOU.

Dr. Debasis Das, Ph.D (CSE)
Assistant Professor
Department of Computer Science & Engineering
Indian Institute of Technology Jodhpur



9. GOVERNING LAWS

- 9.1. In respect to its performance in India, this MoU shall be governed by and construed in accordance with the laws of India and enforceable in the Courts of India.

10. ARBITRATION

- 10.1. Any dispute or difference between the Parties with regard to this MoU and all related matters whatsoever shall be discussed and settled amicably. In the event of any failure to resolve the disputes or differences amicably within Thirty (30) days, all such disputes or differences whatsoever, shall be referred to arbitration. The arbitration proceedings shall be conducted in English and in accordance with the provisions of the Indian Arbitration and Conciliation Act, 1996 or any statutory modification or enactment thereof. The venue of Arbitration shall be in India. The Parties have agreed that a sole arbitrator shall be appointed mutually by both the Parties. The decision of the arbitrator shall be final and binding on the Parties.

IN WITNESS whereof the Parties hereto have caused this MoU to be duly executed and the day and year first above mentioned.

This MoU is hereby executed by:

Name: **Dr Debasis Das**

(Authorised signatory of VANET LAB IIT Jodhpur)

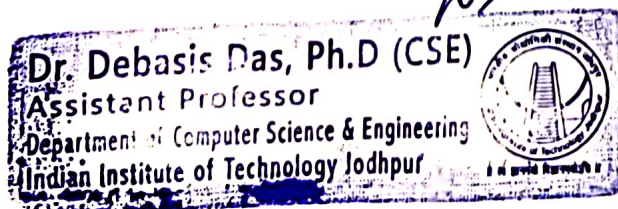
Dr. Debasis Das, Ph.D (CSE)
Assistant Professor
Department of Computer Science & Engineering
Indian Institute of Technology Jodhpur

Designation: **Coordinator and Associate Professor**

Date: 04-12-2023
Place: Jodhpur

Witness 1

[Signature] 04/12/2023
Dr. Nitin Awathare, Assistant Professor
(VANET LAB, IIT Jodhpur)



Name: **Dr Papiya Dutta**

(Authorised signatory of BIET)

[Signature]

Designation: **President, Institution Innovation Council, BIET**

Date: 4/12/23
Place: Hyderabad

Witness 2

[Signature]
Dr Satyabratha Singha, Assistant Prof ECE
, Bharat Institute of Engineering & Technology,
Hyderabad

