MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) is made and executed on this 1st day of November, 2017, at Kanpur.

BETWEEN

Centre for Development of Advanced Computing, Mohali situated at A-34, INDUSTRIAL AREA, PHASE-8, MOHALI, a constituent unit of Centre for Development of Advanced Computing, an autonomous scientific society of the Ministry of Electronics and Information Technology (MeitY), Government of India, registered under the Societies Registration Act of 1860 and the Bombay Public Trusts Act of 1950 having its registered and Head office at Pune University Campus, Pune 411 007 (hereinafter referred to as “C-DAC” and Mohali Unit of C-DAC is referred as “C-DAC Mohali”) which expression shall unless repugnant to the context or meaning thereof shall mean and include its executors, successors, administrators and assigns.

AND

Indian Institute of Technology Kanpur (referred as IIT KANPUR), IIT Kanpur, Kanpur - 208016, U.P; an Institute established under a special act of Parliament of Republic of India, incorporated under the Institutes of Technology Act, 1961, which expression shall unless repugnant to the context or meaning thereof shall mean and include its executors, successors, administrators and assigns.

...PARTY OF THE FIRST PART

...PARTY OF THE SECOND PART;

Hereinafter collectively referred as “Parties” and separately as a “Party”.

WHEREAS C-DAC, Mohali (ISO 9001:2008 certified) has developed competency in the areas of Health Informatics development, Multilingual Technologies, Professional Electronics, Software Technologies, Cyber Forensics and Security solutions for Cyber Threat Analysis and software solutions for e-learning and knowledge management.

AND WHEREAS IIT KANPUR, (DEPT. OF CSE) is engaged in teaching and research and knowledge management and information services development requirements for developing the competencies for professionals in India. Therefore, IIT KANPUR and C-DAC, Mohali intend to collaborate for development and usage of C-DAC Mohali’s ICT tools and software for e-learning, research and knowledge management and information services for training students and faculty at IIT KANPUR,
AND WHEREAS as a result of the interaction between C-DAC Mohali and IIT KANPUR, (DEPT. OF CSE), both the Parties have decided to work together in the above mentioned areas of common interest and have therefore agreed to enter into this Memorandum of Understanding on the following terms and conditions.

1. SCOPE:
   a. This MOU broadly covers various activities intended to be taken by both the Parties related to Research / Design / Development / Deployment/ Use of computer / electronic / digital /software tools and technologies, the mode and methodology of operations and spells out the rights and responsibilities of the Parties hereto.
   b. The Parties initially intend to work in following areas:
      I. Knowledge creation and incubation with the help of joint research in following areas of Cyber Security.
         i. Malware analysis
         ii. Cyber threat landscape situational awareness
         iii. Cyber threat neutralization
         iv. Deception and Counter Deception technologies for cyber threat detection, mitigation & prevention.
      II. Development of technologies useful for industry & nation through Joint research project in the above mentioned areas.
      III. Creation of skilled manpower in the area of cyber security through
            i. Joint workshops & training programs
            ii. Faculty/students/technical staff exchange programs
            iii. Special Interest Groups.
            iv. PhD positions for CDAC Mohali’s staff
      IV. Knowledge & resource sharing on project basis

   c. This MOU is intended to recognize the general basis for the activities identified under para 1b above and to identify the options available for these activities. The intent of this MOU is to develop a cooperative and collaborative working relationship between the Parties and facilitate drawing up of specific projects for any of these activities, as and when the requirement emerges. Specific MOUs/Agreements shall be signed between the Parties for specific projects identified/ drawn up and such specific MOUs/Agreements will define the rights and responsibilities of Parties,
commercial/financial terms and other terms, etc.

2. **RESPONSIBILITIES OF C-DAC Mohali:**
   a. To ensure productive interaction and timely decisions in the matters connected with this understanding, nominate a functionary with sufficient subject potency, authority, responsibility and accountability as the interfacing authority on behalf of C-DAC Mohali.
   b. To design and develop information technology solutions related to the identified areas in time as required by IIT KANPUR, (DEPT. OF CSE) and specifically communicated in writing.
   c. To provide ICT tools developed at C-DAC Mohali from time to time to IIT KANPUR, (DEPT. OF CSE) in furtherance of the objectives set up by this MoU, under specific written agreements.
   d. To provide training and hand holding support as per written agreements to the identified members of IIT KANPUR, (DEPT. OF CSE) after completion of the project/products/services/solutions.
   e. To provide appropriate and adequate technical expertise as agreed specifically under written agreements for maintenance of services provided to IIT KANPUR, (DEPT. OF CSE) by C-DAC Mohali.
   f. CDAC Mohali would share the Honeynet attack data and analysis results with IIT KANPUR, (DEPT. OF CSE) to be used for research and academic purposes. CDAC Mohali will provide IIT KANPUR, (DEPT. OF CSE) free of cost access to the CDAC Mohali Honeynet attack data portal with a condition that IIT KANPUR, (DEPT. OF CSE) would host honeypot sensors in their premises and any research publication based on Honeynet resources provided by CDAC Mohali would be duly acknowledged in the publication.

3. **RESPONSIBILITIES OF IIT KANPUR, (DEPT. OF CSE):**
   a. To ensure productive interaction and timely decisions, nominate a functionary with sufficient authority, responsibility and accountability as an interfacing authority on behalf of IIT KANPUR, (DEPT. OF CSE) to approve/accept solutions proposed by C-DAC Mohali in response to IIT KANPUR, (DEPT. OF CSE) requirements.
   b. IIT KANPUR, (DEPT. OF CSE) shall provide free of charge necessary/required/office/work communication/computing infrastructure, network resources, space and facilities to onsite implementation team of the C-DAC Mohali during MOU period of three years after signing date of MOU.
   c. IIT KANPUR, (DEPT. OF CSE) shall provide relevant inputs, information, diagrams, charts, flow charts, figures, statistics, data etc. required or requested by C-DAC Mohali for carrying out responsibilities of C-DAC Mohali. IIT KANPUR, (DEPT. OF CSE) shall be responsible for ensuring that such information and answers are accurate and complete and provided timely.
d. IIT KANPUR, (DEPT. OF CSE) shall provide/accord approvals, acceptances, sanctions as per mutually agreed schedules from submission of requests/Proposals/Test reports/Job completion by C-DAC Mohali.

e. Mutual exchange of faculty and students, as also enabling professionals of CDAC Mohali to undergo PhD, research programs at IIT KANPUR, (DEPT. OF CSE).

f. IIT KANPUR, (DEPT. OF CSE) will be a part of the Distributed Honeynet system network created by CDAC Mohali by hosting a Distributed Honeynet node at their premises. The Hardware and the network connectivity for the Distributed Honeynet node will be provided by the IIT KANPUR, (DEPT. OF CSE) whereas CDAC Mohali will provide the software and the support. The data captured by the Distributed Honeynet node will enrich the attack data repository at CDAC Mohali and IIT KANPUR, (DEPT. OF CSE) will get a free access of the central database repository through CDAC Mohali Distributed Honeynet web portal. Any research publication based on Honeynet resources provided by CDAC Mohali would be duly acknowledged in the publication.

4. JOINT RESPONSIBILITIES:

a. Nominate coordinators as nodal contacts to represent the Parties and promote interface so as to plan, implement, monitor and review various activity schedules from time to time.

b. Draw the attention of the top management in case of any interface or operational problems.

c. Ensure the safety of the personnel and material whenever placed at either end by the other party.

d. All attempts will be made to ensure that developments and projects are accomplished to a very high degree of quality, with parsimony of time.

e. Each Party shall make its respective contributions to the project.

f. Each Party confirms that it will act in good faith when complying with its respective obligations under this MoU.

5. FINANCIAL ASPECTS:

a. No financial commitment from any party will be assumed unless a formal approval / acceptance to that effect for the works services has been accorded through signed documents by both the Parties.

b. Unless otherwise agreed in writing with a separate agreement signed by both the Parties, both C-DAC Mohali and IIT KANPUR, (DEPT. OF CSE) will bear their own costs and expenses.

6. COMMUNICATION:

Any communication or notice or intimation shall be addressed to the authorized official of respective
Parties and sent to the registered address of the Parties concerned, and e-mail correspondence should not be taken as substitute for any official signed hard copy correspondence in all important documents, such as, but not limited to financial and performance related documents.

**Nodal contacts / authorized official**

a. Contact Officer for C-DAC, Mohali

1. Mr. Rakesh Kumar Sehgal,
   Designation: Joint Director
   E-mail ID: rks@cdac.in
   Mobile No: 9872259555
   Telephone No: 0172-2236143
   Office Address: C-DAC, Mohali,
   A-34, Industrial Area, Phase-8, Mohali

2. Mr. Saurabh Chamotra
   Designation: Principal Engineer, C-DAC, Mohali
   E-mail ID: saurabhc@cdac.in
   Mobile No:
   Telephone No: NIL
   Office Address: C-DAC, Mohali,
   A-34, Industrial Area, Phase-8

b. Contact Officer for IIT KANPUR, (DEPT. OF CSE)

1. Dr. Sandeep K. Shukla
   Designation: Professor
   E-mail ID: sandeeps@cse.iitk.ac.in
   Mobile No: +91-7388792736
   Telephone: +91- (O)
   Fax: +91-
   Office Address: Indian Institute of Technology Kanpur, (IIT KANPUR, (DEPT. OF CSE))

2. Dr. S. Ganesh
   Designation: Dean of R&D
   Email Id: dord@iitk.ac.in
   Mobile No.:
7. CONFIDENTIALITY AND NON DISCLOSURE:

The Faculty members of IIT KANPUR, (DEPT. OF CSE) who will receive Confidential Information from CDAC Mohali under this MoU will be responsible for non-disclosure of the same.

Any software/hardware material, product specifications, designs, financials, information, documents shall be deemed to be in private domain and it shall not be made public or shared with any other party without the prior written consent of the Party which owns it. The material shall be treated as confidential for a minimum period of two years after this MOU comes to an end or as agreed from time to time in writing.

Any information in the public domain or independently received, obtained shall not be treated as confidential/ private/ proprietary.

The Receiving party will disclose the confidential information in pursuant to the order or requirement of a court, administrative agency, or other governmental body, provided, the Receiving Party provides prompt written notice thereof to the Disclosing Party prior to any disclosure to enable the disclosing Party to seek a protective/preventive order or otherwise to prevent or restrict such disclosure.

This clause shall survive even after termination or completion of this MOU.

8. INTELLECTUAL PROPERTY RIGHTS:

Any intellectual property created/ developed in relation to (or) arising out of this MOU shall be jointly owned by C-DAC Mohali & IIT KANPUR. Accordingly, they may execute any application/ affidavit/ assignment/ document/ deed/ power of attorney etc. to protect IPR developed by both the Parties.

9. VALIDITY:

a) This MOU shall be valid for a period of five years from the date of signing of the MOU.

b) The validity of the MOU may be extended by mutual agreement in writing and signed by both the Parties.

c) This MOU may be terminated by either party by giving 30 days prior notice in writing to other party through Registered AD /Speed Post AD.
10. DISPUTE RESOLUTION AND ARBITRATION:
In case any dispute arises between the Parties with respect to the MOU, including its validity, interpretation, implementation or alleged material breach of any of its provisions or regarding a question, including the questions as to whether the termination of this MOU by one Party hereto has been legitimate, both the Parties hereto shall endeavour to settle such dispute amicably. If the Parties fail to bring about an amicable settlement within a period of 30 (thirty) days, dispute shall be referred to the sole arbitrator appointed by Secretary, Ministry of Electronics & Information Technology (MeitY). Arbitration proceedings shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and Rules made there under, or any legislative amendment or modification made thereto. The venue of the arbitration shall be at Delhi. The award given by the arbitrator shall be final and binding on the Parties. The language of arbitration shall be English. The cost of the arbitration proceedings shall initially be borne equally by the Parties and finally by the Party as the Arbitrator may decide. The Courts in Delhi will have exclusive jurisdiction to try and entertain the disputes arising out of this MoU which are not covered under the ambit of arbitration.

11. GOVERNING LAW:
This MOU shall be governed by and interpreted in accordance with the existing laws of India.

12. FORCE MAJEURE:
Neither party to this MOU shall be liable to the other party for any delay or failure on its part in performing any of its obligations under this MOU resulting from any cause beyond its reasonable control, including but not limiting to strikes, riots, civil commotion, or other concerted actions of Workmen, material shortages, fire, floods, explosions, acts of God, acts of state, war, enemy action or terrorist action etc.

13. INDEMNIFICATION:
Either party shall keep other party, its affiliates, shareholders, officers, directors, employees, agents, representatives, and customers indemnified and harmless from and against any and all costs, liabilities, losses, and expenses (including, but not limited to, reasonable fees of attorneys) arising out of any claim, suit, action or proceeding (each, an "Action"), for any act(s) and omissions of such party under any proposal(s) to Prospective client(s) or any resulting contract(s) there from or any incidental matter or in any way arising there from.

14. ASSIGNMENT AND TRANSFER:
Any and all rights, duties and obligations of the Parties under this MOU shall not be transferred or
assigned by either party to any third party without prior written consent of the other party.

15. NON WAIVER:
The failure or neglect by either of the Parties to enforce any of the terms of this MOU shall not be construed as a waiver of its rights preventing subsequent enforcement of such provision or recovery of damages for breach thereof.

16. SEVERABILITY:
The invalidity or unenforceability of any provision of this MOU shall not affect the validity or enforceability of any other provision of this MOU and that shall continue in full force and effect except for any such invalid and unenforceable provision.

17. MODIFICATION:
No modification to this MOU, will be effective unless agreed to in writing by both Parties and duly signed by the authorised signatories of the Parties

18. LIMITATION OF LIABILITY:
In the event of any incidental, consequential, special, and exemplary or direct or indirect damages, or for loss of profits, loss of revenues, or loss of business arising out of the subject matter of this MOU, regardless of the cause of action, even if the party has been advised of the likelihood of damages, the mutually agreed written terms will be operated.

19. NO PARTNERSHIP:
Nothing in this MOU shall be deemed to either constitute or create an association, trust, partnership or joint venture between the Parties or constitute either party the agent of the other party for any purpose.

20. ENTIRE AGREEMENT:
This MOU constitutes the entire Understanding between the Parties. Any and all written or oral agreements, representations or understandings of any kind that may have been made prior to the date hereof shall be deemed to have been superseded by the terms of this MOU.

21. HEADINGS:
The headings shall not limit, alter or affect the meaning of the Clauses headed by them and are solely for the purpose of easy reference.

This MoU is being executed in two counterparts and each is deemed to be an original and both together
shall continue one and the same contract.

In witness whereof the parties hereto have signed this MOU on the day ____, month ____ and year 2017 mentioned herein before.

For and on behalf of C-DAC

Signature -
Name – D.K. Jain
Designation- Director, C-DAC Mohali
Official Seal -

For and on behalf of IIT-Kanpur

Signature-
Name : S. Ganesh
Designation Dean of R&D, IIT Kanpur
Official Seal -

In presence of
1. Signature
Name : Rakesh Kumar Sehgal
Designation: Joint Director, HoD, Cyber Security Tech. Div., CDAC Mohali

2. Signature
Name: Saurabh Chamotra
Designation: Principal Engineer, CSTD CDAC Mohali

In presence of
1. Signature
Name: Dr. Sandeep K. Shukla
Designation: Professor, Dept. of CSE

2. Signature
Name: SUMIT GANGULY
Designation Professor, CSE

Head
Computer Science & Engg. Dept
I.I.T, KANPUR