MEMORANDUM OF UNDERSTANDING

between

Indira Gandhi National Tribal University
(A Central University), Amarkantak (M.P.) India
Under Ministry of HRD, Govt. of India

and

National Institute of Electronics and Information Technology
Electronics Niketan, 6 CGO Complex, Lodhi Road, New Delhi-110003
Department of Electronics & Information Technology, Govt. of India

for

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Development of Academic Cooperation in the Field of Research & Education, Twinning and Collaborative Ph.D. Degree Programs

This Memorandum of Understanding made and entered into on this 9th day of September, 2015 between Indira Gandhi National Tribal University, Amarkantak (M.P.) India (hereinafter called IGNTU) situated at Amarkantak, District: Anuppur, State: Madhya Pradesh, 484886, India a Central University of national importance established by a special Act of Parliament of Republic of India and National Institute of Electronics and Information Technology (hereinafter called NIELIT) situated at Electronics Niketan, 6 CGO Complex, Lodhi Road, New Delhi-110003, under Department of Electronics & Information Technology, Govt. of India. IGNTU and NIELIT recognize their strengths in research and education in one or more disciplines of Computer Science and Information Technology and their mutual interest in engaging themselves in academic cooperation. Therefore, IGNTU and NIELIT agree to establish programs for academic cooperation in the areas of mutual interest, and in accordance with terms and conditions set forth in this memorandum of understanding (hereinafter MoU).

OBJECTIVES OF THE MOU

The goal of this cooperation is to foster collaboration, provide opportunity for global experience, and to facilitate advancement of knowledge, best efforts and frequent interactions. IGNTU and NIELIT agree to explore the possibility of engaging in the following modes of collaboration and the objectives of this MoU are:

a) Exchange of information on research, teaching, learning materials and other literature relevant to their educational and training programmes;

b) Joint organization of seminars, conferences, workshops on Digital India Initiatives, Smart City, Make in India, Skill India and other national issues and short-term continuing education programs on topics of mutual interest, while extending invitations to each other’s faculty to participate therein;

c) To start joint research program, leading to Ph.D. degree, at all virtual centres of NIELIT, so that initiatives like Digital India could be promoted for further development. As per demand of the nation for running Ph.D. Programme in computer science, ICT etc, both institution jointly fulfill the demand and provide broadband/NKN connectivity to offer online programs for Ph.D degree course in Computer Science, Computer Technology, Information Technology, ICT through virtual class via video conferencing, webinars, and streamed content. Ph.D. coursework can be conducted via high definition video conferencing and are tailored to specific classroom topics and curriculum for Ph.D. coursework based on UGC guideline. For Ph.D. coursework, IGNTU and NIELIT staff will collaborate with other academic foreign partners, to integrate Smart city technology, Digital India Initiatives, Natural Language Processing, Mobile Education Apps, IoTs, Big Data and other disciplines to create a dynamic, interactive virtual classroom learning
resources for a virtual fieldtrip experience. Ph.D. coursework programs can be lab and discussion-based;

d) To strengthen, materialize and facilitate Digital India Initiative, initiation and organization of small courses i.e. Certificate and diploma courses on IoT, Big Data, Smart City Technology, Multimedia and Animations etc. to provide a good number of online admissions to students, unemployed youths, and project leaders directly involved and interested in ICT activities with the daily webinars, recorded or live streamed events, and video conferences. Provide course content, materials, webinars, recorded or live streamed events, and video conference to students. Both the institutions will prepare course ordinance in which minimum qualification, syllabus, fee structure, duration etc. would also be illustrated;

e) All seminars, workshops, training programs and classes would be conducted in virtual class rooms/virtual auditorium and the teachers will teach the students through video conferencing/webcasting.

f) Both institutions would organize seminar/conference/workshops on National issues i.e. “Digital India”, “Smart City”, “Semiconductor Export Hub of India”, “Make in India” and “Skill India” “E Governance”, “Digital Education” etc. and the expenses on such account would be finalized by both the institutions.

g) Both institutions would submit Joint proposal and would by engaged in teaching or training programmes sponsored by funding agencies. While extending invitations to each other’s faculty to participate therein;

h) To promote interaction between IGNTU and NIELIT in mutually beneficial areas which so far have not been identified above;

**SCOPE OF MOU**

Cooperation shall be carried out, subject to availability of funds and the approval of the competent authority of IGNTU and NIELIT, through such activities or programmes as:

- Exchange of faculty members
- Exchange of students
- Joint research project and development activities
- Participation and organization of international and national seminars, conference, workshop and academic meetings
- Publication of academic materials, research journal, academic books, news letter, magazine and other information
- Design of special short-term academic programs having national importance
- Exchange of Administrative Managers Coordinators
- Joint cultural Programmes

[Signature]

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• Dual Degree/Diploma/Certificate programs
• Joint Ph.D. programs

PROPOSED MODES OF COLLABORATION

RECOGNISING the mutual interest in the fields of research, development, education, training, transfer of technology and dissemination of knowledge on long term non-commercial basis, and also
RECOGNISING the importance of institutes of higher education’s role in promoting international collaboration and increased contribution of social development.
HEREBY agree to establish collaboration according to terms and conditions set out in the articles following hereunder.

ARTICLE 1 - FIELD OF CO-OPERATION

1. Cooperation between the two universities may be established within any field related to academic and research of mutual interest, for example in the following areas:

   1) Computer Science and Information Technology
   2) Information and Communication Technology
   3) Electronics and Optical Fiber Communication
   4) Mobile Computing
   5) Semiconductor Electronics and Manufacturing Techniques
   6) Smart City and Internet of Things
   7) Big Data
   8) Cloud Computing and Web Technology
   9) Green and Biological Computing

Extension to other areas will be made through further amendments to the present MoU, if needed.

2. Develop Twinning and Dual Degree/Dual Diploma/Dual Certificate/Add On Programmes as per Meta University Concept. This MOU provides opportunities for the establishment of twinning and dual degree programs at the undergraduate, Master and Ph.D. levels, and dual diploma and certificate level initially in the following areas fields as listed below of both institutes:

   a) Diploma in E-Governance and Digital India Initiatives.
b) PG Diploma in Multimedia, Cartoon, Animation and Film Technology.
c) PG Diploma in Internet of Things and Smart City Management.
d) Dual degree programs in Semiconductor Electronics and Embedded System.
e) Dual degree Add on programs in Web, Cloud computing and Big Data.
f) Special MBA in Information Management and Smart City Administrators.
g) Dual certificate, diploma, degree programs as per MHRD initiatives.
h) Dual Ph.D. degree programs in Computer Science, Computer Technology, ICT, Semiconductor Electronics etc.

3. Subsequent programs may be made in any fields mutually agreed upon by the authority of both the institutes. Twinning programs between the respective centre/faculties establish the correspondence and equivalency of course work between the two institutes to facilitate the transfer of credit and course work from one to the other. Dual degree programs as per norms may be offered by both the institutions on mutual consents.

4. Both institutes recognize that subsequent discussion will be needed to identify priorities and resources for the accomplishment of the goals laid out in this MoU. Both institutes also recognize that their respective department/centers will have a primary responsibility for working out course equivalencies for the joint and developing cooperative programs involving their faculty and staff members.

5. Subsequent agreements may be negotiated and established for the implementation of specific cooperative programs.

ARTICLE 2 – EXCHANGE OF FACULTY:

IGNTU and NIELIT will encourage collaboration in research areas of mutual interest. IGNTU will welcome NIELIT faculties/officers to visit IGNTU to engage in academic and scientific research. Reciprocally, NIELIT will welcome academicians from IGNTU to visit NIELIT in order to engage in academic and scientific research. Both institutions agree to seek financial support for cooperative activities from appropriate funding agencies. Proposals concerning the topics, persons and periods of visits will be sent within a reasonable time in advance of the proposed visit.

ARTICLE 3- ADMISSION AND CONDUCT OF CLASS:

1. This MoU provides opportunities for the conduct of classes in order to carry out studies as provided for in this MoU. All seminars, workshops, training programs and classes would be conducted in virtual class rooms/virtual auditorium and the teachers will teach the students through video conferencing/webcasting.
2. Both Institutions also encourage Ph.D. scholar in the context of online professional internship.

3. To offer an authentic and valuable educational experience for students and professionals to further appreciation and understanding of the Digital India, IT Skill, and Digital Culture of India.

4. To offer a comprehensive training course for teachers of elementary, middle, high, and higher secondary school and teachers of higher education and employees/officials of state/central government on Digital Governance and protection. The training course will be organized in virtual classes. Supplementary curriculum materials and in-class activities will be reviewed and resources supporting continuing education will be presented. The initial training course will cover: Digital Governance, Digitization of whole country, Smart City, IoT, Big Data and its importance, conservation/security threats and issues, supplementary curricula and resources, and questions and answers. The purpose of this course is to familiarize employees/officials and teachers so they are more aware, not only of Digital India, but of serious problems facing in implementation stage and the need for changing our habits to ensure a sustainable digital future. Provide a comprehensive study guide and materials for all such programs.

5. IGNTU and the NIELIT will work collaboratively to develop a series of educational presentations/materials on Digital India Initiatives, Digital Governance, and their habitat, Smart City, IT Skills and Digital Culture. These presentations/materials will be designed to help Indian peoples understand that local action can contribute to global change w.r.t. Digitization of country.

ARTICLE 4 - RESEARCH PROJECTS:

1. Efforts will be made to share information about ongoing research activities in order to establish contacts and collaboration between professionals working within the same field.

2. Research Projects and the composition of research teams will be approved by the participating institutions. Efforts will be made to evaluate the need for participating staff and the location of the research activity.

3. Every research project will have a team leader, who will be responsible for reporting on the project status.
ARTICLE 5- EXCHANGE OF SCIENTIFIC, TECHNICAL AND TEACHING MATERIAL

IGNTU and NIELIT will exchange information on research and educational programmes and teaching learning material and other literature relevant to their educational and research programmes. Further, IGNTU and NIELIT agree to explore ways to share teaching learning material, and other relevant literature, while respecting each other's intellectual property and other rights.

ARTICLE 6- JOINT CONFERENCES, WORKSHOPS AND SHORT-TERM COURSES

IGNTU and NIELIT agree to help identify and invite faculty members from the other institution to participate in conferences, workshops and short-term courses. The terms and conditions for such participation will be worked out by mutual agreement between the invited faculty member(s) and the institution extending such an invitation. When a faculty member visits the other institution on invitation or as part of such joint activity, then such a visit will be classified as such, and handled as per rules of individual institution.

ARTICLE 7 - INTELLECTUAL PROPERTY RIGHTS (IPR)

1. Each party will ensure appropriate protection of Intellectual Property Rights generated from cooperation pursuant to MOU, consistent with their respective laws, rules and regulations and agreements to which both parties are committed.

2. In case research is carried out solely and separately by the Party or the research results are obtained through the sole and separate effort of the Party, the party concerned alone will apply for grant of IPR and once granted, the IPR will be solely owned by the concerned party.

3. In case research results obtained through joint activities, the grant of intellectual property rights will be sought by the parties jointly and once granted these rights will be jointly owned by the parties.

4. The Parties shall not assign any rights and obligations arising out of the IPR generated to inventions/activities carried out under the MOU to any third Party without consent of the other party.

5. In case of research results obtained through joint activities under this MOU, both parties will apply as co-applicants for the protection of intellectual property rights subject to exclusive rights of both the Parties to commercialize the technology in their respective areas.

6. Any publication, document and/or paper arising out of joint work conducted by the participants pursuant to this MOU will be jointly owned. The use of the name, logo and/or official emblem of the participants on any publication, document and/or paper will require
prior permission of both the participants. It may however be ensured that the official emblem and logo is not misused.

ARTICLE 8 - FUNDING AND FINANCE:

1. The two institutions will seek funding for the link programme from various sources.

2. The acquired funds will be subject to accounting procedures of the two Institutions. However, the accounting would not attract any infringement of the GFR of the Govt. of India.

3. The collaborating institutions will offer logistic support for initiating the collaboration and for working out draft proposals for the activities.

ARTICLE 9 - LINK MANAGEMENT AND ADMINISTRATION:

1. Negotiation, implementation and cooperation of the MoU falls under the responsibility of both the institutions via their respective CEOs or any person(s) delegated authority by the competent authorities of both the institutions.

2. Issues about specific activities including rights and obligations of each party shall be notified or communicated to the offices mentioned in 9.1 above.

3. The contact mentioned above can nominate a member of the staff from within their institutions to coordinate the activities.

4. This MOU is valid from the date of its signing by both parties and it shall be valid for a period of five years from the date of coming into existence. It would be automatically extended for further periods of five years at a time, unless cancelled by either party in writing at least six months prior to its expiration. It may be revised or modified at any time by mutual written consent of the Parties.

ARTICLE 10 - GENERAL PROVISIONS:

1. The two institutions will carry out research activities, as a follow up to this MoU. The activities must be carried out in accordance with appropriate laws and regulations existing in each country and institution.

2. The two institutions shall initiate and exchange research publication lists and other publications relevant to the project. This will be provided with adequate security as far as intellectual property laws are concerned.

3. All publications resulting from the collaboration between the two institutions will be mentioned in the scientific reports of the institutions. Likewise, this MoU must also be
mentioned in all formal presentations which result from the collaboration under the terms of this MoU.

**ARTICLE 11- CONFIDENTIALITY**

1. All information and documents to be exchanged pursuant to the Memorandum of Understanding will be kept confidential by the Parties and will be used subject to such terms as each Party may specify. The Parties will not use the information for purposes other than that specified without the prior written consent of the other party.

2. All Confidential Information shall remain the exclusive property of the disclosing party. The Parties agree that this agreement and the disclosure of the Confidential Information do not grant or imply any license, interest or right to the Recipient in respect to any intellectual property right of the other Party.

3. Unpublished information, whether oral, in writing or otherwise, discovered or conceived by the scientists or technicians and exchanged under the provisions of this MOU will not be transmitted to a third party, unless otherwise agreed by the Parties.

**ARTICLE 12- NON-EXCLUSIVITY**

The relationship of the parties under this MoU shall be nonexclusive and both parties, including their affiliates, subsidiaries and divisions, are free to pursue other agreements or collaborations of any kind.

**ARTICLE 13- RELATIONSHIP**

Nothing in this MOU shall be construed to make either party a partner, an agent or legal representative of the other for any purpose.

**ARTICLE 14- ASSIGNMENT**

It is understood by the Parties herein this MoU is based on the professional competence and expertise of each party and hence neither Party shall transfer or assign this Agreement, or rights or obligations arising hereunder, either wholly or in part, to any third party.

[Signatures]
SIGNED IN

This MOU is executed in two originals with each text being an official version of the MOU and having equal legal validity.

By signing below, the parties, acting by their duly authorized officers, have caused this MoU to be executed and effective from the date of its signing.

On behalf of

Indira Gandhi National Tribal University
Amarkantak (M.P.) India

Name: Professor T. V. Kattimani
Designation: Vice-Chancellor
Date: 9th September, 2015

Seal

Witness:

Name: Dr. Vikash Kumar Singh
Designation: Head Dept. of
Address: Computer Science
IGNTU, Amarkantak (M. P.)

On behalf of

National Institute of Electronics and Information Technology
New Delhi-110003, India

Name: Dr. Ashwani Kumar Sharma
Designation: Managing Director
Date: 9th September, 2015

Seal

Witness:

Name: Janak Raj
Designation: Registrar
Address: NIELIT, CGO Complex
Delhi