Report on 3-day hands on training programme on 3D printing

Assam Science and Technology University organized 3-day hands on training programme on 3D printing from February 10 to 12,2021. The workshop was organized under TEQIP-III, MHRD, Govt. of India. This event was organized at the ASTU campus and all the governmental protocols such as maintaining social distancing, mandatory use of mask and using alcohol-based hand sanitizers were followed strictly. The maximum number of participants was also restricted to 30 so that social distancing was maintained at all times.

3D printing is an emerging technology that holds a lot of promises for the future. The aim of this hands-on training programme was to acquaint the students with the fundamentals of 3D printing, teach them to assemble a basic 3D printer, using the software associated with the 3D printer and actually 3D printing a product. 7 young trainers who are actively working in the 3D printing domain were selected as trainers for the event. All the 30 participants were segregated in groups of 6 into 5 groups.

PROGRAMME SCHEDULE

DAY	TIME	SESSION
1	9.30-10.00AM	**REGISTRATION AND BREAKFAST**
	10.00-11.00AM	Orientation talk Additive Manufacturing
	11.00-12.00PM	Introductionto3Dpenand application
	12.00-13.00PM	Introduction to 3D printer - Build your 3D printer
	13.00-13.45PM	**LUNCH**
	13.45-16.00PM	Build your 3D printer continues and Test Print
2	9.30-10.00AM	**BREAKFAST**
	10.00-11.00AM	Expert Talk by Dr. Sajan Kapil (Asst.Prof. IITG)
	11.00-11.30AM	Make a prototype
	11.30-13.00PM	Introduction to 3D design software,slicing tools
	13.00-13.45PM	**LUNCH**
	13.45-16.00PM	Printing and testing of the parts
3	9.30-10.00AM	**BREAKFAST**
	10.00-13.00PM	Printing, testing and finishing
	13.00-13.45PM	**LUNCH**
	13.45-14.30PM	Printing, testing and finishing
	14.30-15.30PM	Project showcase
	15.30-16.30PM	Valedictory session

Venue:ASTU Seminar Hall
Time:9.30am

Dr. Sajan Kapil, Assistant Professor, Department of Mechanical Engineering, IIT-G, was the invited expert on the second day (11/02/2021) of the training programme. He attended the event virtually through Zoom Cloud meetings. Dr. Kapil enlightened the students about the importance of 3D printing at current times, the principle of 3D printers, different types of 3D printers and its application.

All the participants thoroughly enjoyed the 3-day training. Each one of them gained valuable hands-on experience with 3D printers and the proprietary software to design the virtual models.

Attendance of the training programme

ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY

(A State University of Government of Assam constituted by "Assam Science and Technology University Act, 2009")
Tetelia Road, Near Assam Engineering College, Jalukbari, Guwahati-781013, Assam
Website: www.astu.ac.in

Three day workshop on 3-D printing

Trainer Attendance

Date: 10/02/2021

Sl No.	Name	Signature
1	Pratim Das	
2	DIPJYOTI KUMAR	
3	Manash Kuntal Deka	
4	DEVASISH SAIKIA	D. Saikia.
5	Kaushik Kashyap Borah	
6	Pranab Jyoti Doley	
7	MISISIPI HAZARIKA	
8		
10		

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Website: www.astu.ac.in

VENUE- ASTU,Guwahati

Three Day workshop on 3-D Printing under TEQIP-III on 10th to 12th February,2021

Registration

SL NO	NAME (fill up in block letters)	CASTE (ST/SC/OBC/UR)	GENDER (M/F)	INSTITUTE	SIGNATURE		
					10/02/2021	11/02/2021	12/02/2021
1	BHASKAR JYOTI KUMAR	OBC	M	SITM			
2	ERIK DAUDUNG LANGTHASA	ST	M	SITM			
3	CHITRALI HAZARIKA	MOBC	F	ASTU			
4	ARUNIMA KOCH	OBC	F	ASTU			
5	GAURAV SAIKIA	MOBC	M	ASTU			
6	IKRAMUL HOSSAIN MONDAL	GE	M	ASTU			
7	W. JASON SINGHA	OBC	M	ASTU			
8	SAURAV BHATTACHARJEE	GEN	M	ASTU			
9	Himangshu Roy Pathak	OBC	M	AEC			
10	Biswajit Dutta	GEN	M	AEC			
11	Mridul Karmakar	OBC	M	ASTU			
12	Shivam Sharma	GEN	M	ASTU			
13	SAGAR DEKA	GEN	M	ASTU AEC			
14	PRINCE DAS	SC	M	ASTU			

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Website: www.astu.ac.in

SL NO	NAME (fill up in block letters)	CASTE (ST/SC/OBC/UR)	GENDER (M/F)	INSTITUTE	SIGNATURE		
					10/02/2021	11/02/2021	12/02/2021
15	BITOPAN TALUKDAR	UR	M	ASTU			
16	Nilkamal Ojah	UR	M	ASTU			
17	Nilam Pathak	UR	M	ASTU			
18	Anwar Deka	UR	M	ASM			
19	Ankur Tamaria	OBC	M	ASTU			
20	ANGSHUMAN DEV SHARMA	GEN UR	M	AEC			
21	Konkon Sharma Barual	UR	M	AEC			
22	Pallas Ka Bora	OBC	M	AEC			
23	Hemagni Deka	UR	F	ASTU			
24	Karabee Das	ST	F	ASTU			
25	Nishant Bharali	GEN	M	ASTU			
26	Ashish Agarwal	GEN	M	AEC			
27	Simmoy Kalita	GEN	M	AEC			
28	Hippuraj Medhi	GEN	M	AEC			
29	Dhrubon Kohila	ASTU	M	ASTU			
30	Tapan Rajbongshi	OBC	M	ASTU			
31	Sanghita Dutta	OBC	F	ASTU			
32	P. Ram		M	ASTU			

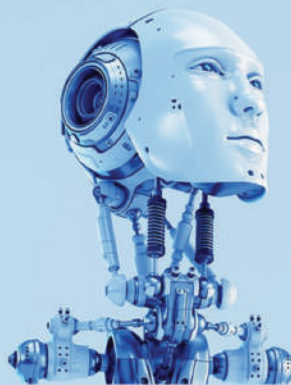| SL NO	NAME (fill up in block letters)	CASTE (ST/SC/OBC/UR)	GENDER (M/F)	INSTITUTE	SIGNATURE		
					10/02/2021	11/02/2021	12/02/2021
33	Tapashi Kalita	UR	f	ASTU	TKalita	TKalita	TKalita
34	M. Barual		M.	ASTU			
35	Manash Pratim Lahkar	UR	M	A.E.C			
36	Registrar		M	ASTU			
37	V.C, ASTU		M	ASTU			
38	Academic Registrar		M	ASTU			
39	Sweeper		F	ASTU	✓	✓	✓
40	BASANTA BARMAN		M	ASTU			
41	SANDIP DAS	SC	M	AEC	Sandip	Sandip	Sandip
42	KANDARPA DAS	UR	M	ASTU	Kandarpa	Kandarpa	Kandarpa
43	PABAN JYOTI BORAH	UR	M	AEC	Paban Jy. Borah	Paban Jy. Borah	Paban Jy. Borah
44	Angshuman Rajkhowa	OBC	M	ASTU			
45	Mahornow Bhattacharjee	GEN	M	ASTU			
46	Nabajit Deu chaudhury	GEN	M	ASTU			
47	JAWAHAR SAHU			ASTU			
48	SIDDUARTH			ASTU			
49	BHARAT KAKOTY	GEN	M	ASTU			

Pictures from the event

Two - Day workshop on

Artificial Intelligence

Organized by
Assam Science and Technology University

In Collaboration with
Dept. of Computer Applications,
Assam Engineering College and
TapApp Technologies

Report

TEQIP3 sponsored Workshop on **Artificial Intelligence(AI)**: the opportunities and challenges, a **first of its kind and an awareness** workshop on **AI, 6-7 September December 2019 at NEDFI House Dispur guwahati: a report**

This workshop on **AI** is the **first of its kind** being organized by **Assam Science & Technology University(ASTU)** in the field of AI in **Computer Science & Engineering, Information Technology, Electronics and Communication Engineering** encompassing all institutes/organizations under ASTU where AI and it's applications and specific issues were directly or indirectly reflected in this workshop. The workshop was **hosted by the Department of Computer Applications,AEC in collaboration with TapApp technologies, a Pan-India IT development Company.** The main idea is to bring in focus the **academic and industry collaborations** around the implementation of **AI in various engineering disciplines** as well as other public sectors.

The workshop envisaged to provide a platform for a **three way dialogue between Academia & Researchers, Business/industry and the Government,** thus making determined efforts to deal with issues mainly **on education requiring technological intervention**.

The **workshop opened up a forum** for high quality research in the areas of **AI in the education** sector. Researchers, developers, and practitioners from academia and industry were invited to present their state of the art works and their development findings on various topics pertaining to AI and its applications. Active industrial participations showcasing **with state-of-art products** developed by various software houses like **Microsoft, Google etc** and trends along with hands on experiences have enriched the workshop its standard and accelerated impact through effective engagement with decision makers namely the **Govt. Policy makers, educators, research scholars and students**.

The workshop started with the inaugural session where **Prof Gautam Barua, Director of IIIT Guwahati was the Chief Guest** along with **Guests of Honour Sri. Niraj Verma, Chief Secretary Department of IT, Govt. Of Assam, Sri Rajesh Kumar, Chief Technical Officer** and. **Microsoft India Public Sector** and **representative of the VC, ASTU and Academic Registrar Dr B R Phukan.**

The program started at 10.00am sharp with **Dr Amrita Ganguly, Associate Professor, Assam Engineering College and MC** of the event welcoming the guests and the participants from various organisations and the students. We had participations from **Gauhati University, Downtown University, Cotton University, Assam Engg College, ICT Academy, IIIT Guwahati, Department of IT, Assam, ASTEC, Remote Sensing** etc. The inaugural ceremonious lamp was lit and the addresses by various dignitaries followed. They all expressed in unison on **the scope and the need of AI and its applications** in the current scenario and asked for more **in depth focus** on **building AI technologies** in all areas especially in education. Involvement of the **Govt IT department** was also **assured**.

After a short tea break **the first keynote** was delivered by **Prof Gautam Barua**. He spoke about AI and how it is likely to revolutionize the education sector. The mundane works of teachers like evaluations, preparing presentations from lectures, checking answer scripts, giving individual attention to a large class etc if developed using AI to aid the teachers would do wonders to the teachers. Prof Barua reiterated the **use of AI in teaching** and the good sides of it in terms of **reducing failure rates and student-pace-based learning**.

This was followed by the **2nd keynote** delivered by **Sri Deepak Goswami, Ex DDG, NIC Assam** on the various aspects of development of AI and he threw directions on how one can just about start on with AI from a novice point of view. His delivery was solely based on how a student can get into AI technologies **with ease**.

After an hour of lunch break, **Prof SB Nair, professor, Dept of computer science & Engg, IIT Guwahati** elucidated the **3rd keynote** on **deriving New AI techniques using age old Bio-techniques.**

This was followed by the **4th keynote by Sri Rajesh Kumar, CTO, Microsoft India** on the developments of AI in diverse sectors and the scope of work in our country with our new education policy talking about huge developments in terms of AI. He told that Microsoft had signed an **MoU with CBSE** to **teach AI in all CBSE schools**. Also **Niti-Ayog has entrusted Microsoft to train about 5000 Govt officials** on how to leverage AI and cloud computing in their diverse work sectors.

A **panel discussion** moderated by **Sri Rajesh Kumar** and participated by **Sri Deepak Goswami , Prof Maushumi Barooah and Sri Sanjiv Singh, CEO of TapApp Technologies** were held where on various **open learning environments were demonstrated online** and various **career options** in AI were discussed that the students may find interest in AI to venture into.

Day 2 started with a **keynote addresses by Sri Mukesh Sahay, ex-DGP Assam Police**, and **2 technical sessions delivered byDr Firdous Borbhuyan, Associate Professor, IIIT Guwahati, and Sri Sajiv Singh, CEO, TapApp Technologies.**

One session was dedicated to **information dissemination on different AI Projects** that one can apply to (both **national and international**) and the **various learning environments** and **free sites** where students can log into and start working on with it.

This was followed by a **panel discussion** moderated by **Dr F Borbhuyan** and participated by **Sri Mukesh Sahay, Deepak goswami , Prof Maushumi Barooah, Professor, Assam Engineering College and Dr Anupam Das, Assistant Professor, Cotton Universality.** Main focus was on the **readiness of teachers to embrace AI** and the kind of training that needs to taken to achieve that.

The **feedback session both oral and on paper** were also taken to have a feel of where we can go next. A very **positive feedback** resulted from students on the exposure of such an important field of Computer science which has **encompassed its usability across all sectors in our**

society. There is definitely a need especially **from the students to get deeper into this topic on AI** and work further into it with more **hands on session and product-display** etc.

Finally the day ended with a very **surprising panel moderated** by a **Professor from Cotton University** who was a participant of the workshop and **student representatives** appreciating the workshop and its deliverables and what more they are expecting out of it.

The workshop also definitely provided a platform for **networking and consortium building in AI** leading to future collaborations with industry. A sumptuous high tea were served.

My deep gratitude to our honorable VC, Dr Dhiraj Bora and his **team** for allowing us to **host such a thought provoking and insightful consortium** of a good blend of industry and academia experts. Thank you.

We **look forward** to working with you again and host a **more in-depth session on AI** in the near future.

yours sincerely,

Maushumi Barooah,
Professor and Organizing Chair, Workshop on AI
Dept. of Computer Applications
Assam Engineering College

ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY

Two-Day Workshop on

"Artificial Intelligence"

In Collaboration with
Dept. of Computer Applications, Assam Engineering College and TapApp Technologies

(Under TEQIP-III)

Certificate of Participation

This is to certify that

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of

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has participated in the Two-day Workshop on

"Artificial Intelligence"

on September 6 & 7, 2019.
The workshop was organized by Assam Science and Technology University in collaboration with Dept. of Computer Application, Assam Engineering College and TapApp Technologies in the Auditorium of NEDFi Convention Centre, Guwahati.

(Prof. Dhiraj Bora)
Vice Chancellor, ASTU

(Dr. Maushumi Barooah)
Professor, Dept. of Computer Application, AEC

(Dr. Nripen Das)
Registrar, ASTU

Five Day Short Term Course
On

RECENT ADVANCEMENTS IN 5G WIRELESS COMMUNICATIONS : PHYSCIAL AND HIGHER LAYER PERSPECTIVES

11th March to 15th March, 2020

Venue : Conference Hall , BVEC, Karimganj

UNDER TEQIP III PROJECT

Organizing Committee

Chief Patron:
- Dr. Dhiraj Bora, Vice-Chancellor, ASTU, Guwahati

Patron:
- Dr. Nripen Das, Registrar, ASTU, Guwahati

Chairman:
- Dr. M. H. Mazumder, Principal, BVEC, Karimganj

Vice Chairman:
- Mr. Gautam Nath , Asst. Prof., CSE , BVEC, Karimganj

Academic Advisor and TEQIP Coordinator:
- Dr. B. R . Phukan, Academic Registrar, ASTU , Guwahati

Financial Advisor:
- Mr. Debajyoti Goswami, Finance & Accounts Officer, ASTU, Guwahati

Convener:
- Mr.Sabyasachi Bhattacharyya, Asst. Prof., ECE , BVEC

Co-Convener(s):
- Mr. Nabarun Chakraborty, Asst. Prof., ECE , BVEC
- Mr. Angaraj Das, Asst. Prof., ECE, BVEC

Members:
- Mr. Rajiv Lochan Pathak , Project Officer(TEQIP-III) , ASTU , Guwahati
- Mr. Saharul Alam Barlaskar, Asst. Prof., & HOD (i/c) ECE , BVEC
- Ms. Pallavi Das, Asst. Prof. ECE, BVEC
- Ms. Jayashree Das, Asst. Prof., & HOD (i/c) CSE, BVEC
- Mr. Harun Al Rashid Md.Ghalib, Asst.Prof.,ECE, BVEC
- Ms. Swapna Bharali, Asst. Prof., ECE, BVEC
- Dr. Lachit Dutta, Asst. Prof., ECE, BVEC
- Md. Sarful Alam, Asst. Prof., ECE, BVEC
- Ms. Pinaj Nasiri, Asst. Prof., ECE, BVEC
- Mrs. Darshana Saikia, Asst. Prof. ECE, BVEC
- Mrs. Maram Smriti Boruah, Asst. Prof., CSE, BVEC
- Mr. Saifuddin Ahmed, Asst. Prof., CSE, BVEC
- Dr. Ruhul Amin Reza , Asst. Prof., & HOD (i/c) (Chemistry), BVEC
- Mr. Biplab Singha, Asst. Prof., & HoD (i/c) (Mathematics), BVEC
- Dr. Gayatri Ghosh, Asst. Prof., & HoD (i/c) (Physics), BVEC

Supporting Members:
- Mrs. Pingki Sarma, ASTU, Guwahati

- Mr. Maharnav Bhattacharyya, ASTU, Guwahati
- Mr. Nilam Pathak, ASTU, Guwahati
- Ms. Hemagni Deka, ASTU, Guwahati
- Mr. Anuron Deka, ASTU, Guwahati
- Mr. Debasish Deka, ASTU, Guwahati
- Mr. Chimoy Jyoti Das, BVEC, Karimganj
- Mr. Javed Hussain Mazumdar, BVEC, Karimganj
- Ms. Jutika Basumatary, BVEC, Karimganj
- Mr. Mrinal Das Laskar, BVEC, Karimganj
- Mrs. Nilupa Begum Laskar, BVEC, Karimganj
- Mr. Ahabab Ahmed Tapadar, BVEC, Karimganj
- Mr. Shahidul Alom Barbhuiya, BVEC, Karimganj

ABOUT THE PROGRAMME

5G wireless is 5th generation wireless technology where the data speeds are expected to be 100 times faster than the 4G networks. It completes wireless communication with almost no limitations. It can be called a real wireless world. It has incredible transmission speed and offers worldwide cellular phone, extraordinary data capabilities, high connectivity, more power and features in hand held phones, more dialing speed, more clarity in video and audio. 5G uses ultra wide band networks with higher bandwidths at lower energy levels. So, keeping in mind the future aspects of 5G wireless networks, the Assam Science and Technology University and Barak Valley Engineering College joined hands to organize a short term course on "RECENT ADVANCEMENTS IN 5G WIRELESS COMMUNICATIONS: PHYSICAL AND HIGHER LAYER PERSPECTIVES".

Outcome of the Course: The students will get an exposure about many features and capabilities of 5G networks that will enhance their ability to understand the underlying technologies and will also intrigue them to learn more about this topic in the time to come or even pursue it as their future academic and professional career.

Who can participate?
- Students of B.E/B.Tech 6th semester or above from ETE or CSE.
- M.Tech students & PhD scholars from ETE & CSE.
- Interested faculty members from Engineering colleges and Polytechnics.

Five - Day Short Term Course

on

"Recent Advancements in 5G Wireless Communications: *Physical and Higher Layer Perspectives"*

(Under TEQIP III Project)

Organized by

Assam Science & Technology University Jalukbari, Guwahati, Assam 781013

In *collaboration with*

Barak Valley Engineering College, Nirala, Karimganj, Assam-788701

Date:
11th March to 15th March , 2020

About Assam Science & Technology University:

Assam Science & Technology University is a State University of Government of Assam which was established on 4th January, 2010 by the "Assam Science and Technology University Act, 2009". The aim of ASTU is to bring all existing Engineering College/ Institutions in a common platform to follow same course curriculum. The vision of ASTU is to give synchronized strategic and operational leadership to technical education of Assam through a unified structure and create state of art infrastructure and train excellent academic personnel to be with the international peers.

About BVEC, Karimganj:

Barak Valley Engineering College is the first state government engineering college in the Barak valley region of Assam. The noble initiative for setting up this engineering college was taken in the year of 2009 by the Government of Assam and started its full-fledged operation in 2017 under the purview of Directorate of Technical Education (DTE), Assam. The campus is situated in Nirala, south-east part of Karimganj district of Assam. The college presently offers two undergraduate degree courses (Bachelor of Engineering course) in two different disciplines viz. Computer Science & Engineering and Electronics &Communication engineering Departments, which is affiliated to ASTU and approved by AICTE, New Delhi.

How to reach BVEC ?

It is about 22 kms and 15 kms away from Badarpur ASTC bus station and Badarpur railway junction respectively. The closest airport is Kumbhirgram airport Silchar, which is at a distance of around 60 km from the college campus.

Resource Person:

1. Prof. Ratnajit Bhattacharjee, Dept. of EEE, IIT Guwahati

2. Dr. Sudarshan Mukherjee, Assistant Professor, Dept. of EEE, IIT Guwahati

3. Dr. Rakesh Matam, Assistant Professor & Head, Dept. of CSE, IIIT Guwahati

4. Dr. Ashraf Hossain, Assistant Professor, Dept. of ECE, NIT Silchar

5. Prof. Raja Datta, Head, G.S. Sanyal School of Telecommunication, Professor, Electronics and Electrical Communication Engg., and Professor (i/c) Telephone(Technology Telecom Centre), IIT Kharagpur

Note:

❖ **Only a few seats are available for filling up by external participants.**
❖ **Interested (external) participants are to fill up the registration form and send the scanned copy of the form to the mentioned Email ID by 7th March 2020.**
❖ **The list of selected participants shall be uploaded in the institute website on 8th March 2020.**
❖ **All the participants must carry their laptops with the latest version of MATLAB installed .**
❖ **For getting a certificate a participant must mandatorily attend more than 80% of the sessions and must also submit all the assignments during the course.**

Registration Form

Name of the Participant: ……………………………

……………………………………………………………

Designation: ……………………………………………

Department: ……………………………………………

Institution: ……………………………………………

Address for Communication: ……………………

……………………………………………………………

……………………………………………………………

Contact No: ……………………………………………

Email ID: ………………………………………………

Signature: ………………………………………………

Contact:

Barak Valley Engineering CollegeKarimganj, Assam- 788701

Co-ordinator:

Mobile :7002299028
Email Id:5gregbvec@gmail.com