Dattakala Shikshan Sanstha's
DATTAKALA GROUP OF INSTITUTIONS
| NAAC Accredited & ISO Certified |
Approved by AICTE - New Delhi, DTE - Mumbai, Recognized by Govt. of Maharashtra
Affiliated to Savitribai Phule Pune University, Pune and M.S.B.T.E., Mumbai
| DTE Code: 6628 | MSBTE Code: 1712 | AICTE ID: 1-5986711 | AISHE Code: C-44576 |

Date:23/08/2023

Notice

All the Students and Staff are hereby informed that a Dattakala Group Of Institutions Faculty Of Engineering is Organising the Guest Lecture on **"Advanced Technology "** on 25/08/2023.

All the Students and Staff are requested to be present at 10.00. a.m At Seminar Hall.

Resource Person: Manoj Shelar

Venue:1st floor Seminar Hall

Principal

Date:26/08/2023

A Report On "Advanced Technology"

Dattakala Group Of Institute Faculty Of Engineering is Organising the Guest Lecture on Advanced Technology on date 25/08/2023 From 10. 00 AM onwards.

Name of the Program: Guest Lecture on Advanced Technology

Name of Speaker: Manoj Shelar

Date: of Conduction:25/08/2023

Objectives:

To make the students aware about the latest trends in Information Technology.

Targeted Audience: All students SE to BE.

Venue: DGOIFOE Swami-Chincholi , Seminar Hall.

Time: 10.00 AM onwards.

No. of Participants: 60

What Is Advanced Technology?

Advanced technology is defined as a new or developing IT innovation that still has relatively few users, yet promises to provide future, significant value. While this term differs from both advanced manufacturing and manufacturing technology, they have relationships with one another. Advanced manufacturing takes advantage of both advanced technology and manufacturing technology to improve processes and products within the supply chain.

When industry experts refer to manufacturing technology, they are discussing a spectrum of machine tools which range from highly advanced CNCs to manufacturing robots. State of the art machines, for example, may be considered advanced technology until they are widely adopted.

Where Is Advanced Technology Used?

Advanced technology is used in a variety of environments, including:

- Artificial Intelligence (AI)
- Gamification
- Geofencing
- Autonomous Robots
- Spacecraft

- Semantic Search
- Swarm Intelligence
- Vertical Farming

Advanced technology and the IT experts engaged in its creation are needed in these industries (and a variety of others) to simplify and optimize activities and necessities like unit testing, version control, outlining and managed code.

Advanced manufacturing is required in these spaces to efficiently create the products that make industry innovations possible. Moreover, advanced manufacturing technology like manufacturing robots and autonomous robots allow for the quick and cost-effective development of products required to drive critical technology areas such as the space industry and vertical farming.

Similarly, advanced technology influences the software sector by automating and improving critical IT processes. These include checking a build, which used to be done manually, and the emergence of integrated development environments, which reduces coding errors and provides a single-view dashboard for accessing an entire suite of development tools.

The Future of Advanced Technology

The future of advanced technology has no limit – and will continue to enhance the personal lives of consumers and their families. It will also make services and

processes simpler and more affordable within both the software and manufacturing sectors. While just a sample, these innovations include:

Self-driving Cars

Also known as autonomous vehicles (AVs), self-driving cars will improve safety on the road for drivers, passengers, and pedestrians. While an estimated 1.2 million car-related injuries happen globally each year, safety sensors powered by lasers and quick-thinking software will eliminate human error and make accidents less probable. In addition, self-driving cars will free up space in cities and neighbourhoods while reducing the amount of traffic on local roads and busy highways. They are also expected to positively impact the environment, since fewer cars are expected to be on the road.

Virtual Reality

Now that computer processors are powerful enough to create lifelike experiences, virtual and augmented reality will allow people and companies to realize more possibilities than ever before. Psychiatry professionals will be able to use the technology to treat conditions like PTSD, while construction and architecture firms will have the power to predict project challenges and remedy issues before they happen. Real estate agents will be able to take their clients through each facet of a home or building without leaving the office, while surgeons will be able to practice and optimize procedures without the need for a human patient.

Artificial Intelligence

Emerging algorithms, robust computers, and data collection will allow various types of manufacturing technologies, home appliances, and robots to learn from experience and improve the creation and function of both products and services. While much of the space is still considered advanced technology, AI is already proving to be worthwhile. For example, Google's DeepMind AI has drastically reduced its data center's utility costs, while Uber and Lyft already use machine learning to quickly minimize wait times and automatically predict rider demand.

The Internet of Things (IoT) is helping make these innovations a reality. With the interconnection of smart computing devices in everyday objects like a thermostat, dishwasher, and refrigerator, families are able to do everything from reduce energy costs to eliminate menial tasks. For example, it is possible to wash the dishes with a simple voice command – or be reminded to eat fruit and vegetables that will soon go bad.

While IoT is improving daily life, it is also changing the landscape of the software and cyber security sectors. More devices and interconnectivity mean increased challenges in:

- **Securing networks and data:** Personal smart products and advanced manufacturing technologies alike are more hackable, which means IT experts will be busy finding ways to increase device security solutions and reduce attack vectors.

- **Enhancing encryption:** It will increasingly become more important for computer integrated manufacturing and manufacturing business technology

- **Improving hardware:** Better built-in security will be demanded of IoT products and their OEMs.

While there are various security considerations that both software companies and IoT device manufacturers need to be aware of, there also is much excitement about what will be possible for the average human. Emerging, advanced technology on the horizon includes:

- Pocket supercomputers
- Additional developments in cryptocurrencies and blockchains
- Improved food systems
- Higher quality online education
- The advanced Space Age
- More improvements to digital medicine

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Date: -25/08/2024

ATTENDANCE SHEET

Event Topic :- "Advance Technology"
Speaker Name :-Manoj Shelar

Sr. No	Name of Student
1	AKADE RUTUJA SANJAY
2	BHISE KAJAL RAJENDRA
3	BHUMKAR VISHAL DNYANDEV
4	BORULE SHRIDHAR DATTATRYA
5	CHAVAN SHRUTI SANTOSH
6	CHAWEL NIKITA SANTOSH
7	CHENDAKE DATTATRAY LIMBANNA
8	CHHALLARE OM SACHIN
9	CHINTOLE VISHAKHA GANGADHAR
10	DESHMUKH GAURI VINOD
11	DHAGE DIGAMBAR DARYAPPA
12	DUDHAL HARSH RAVINDRA
13	GADE ROHIT RAMA
14	GADHE PRIYANKA SHANKAR
15	GAIKWAD ATISH ANIL
16	GAIKWAD YOGESH SHANKAR
17	GAWADE PRAPTI KAILAS
18	GHORPADE VAIBHAVI DHANAJI
19	HADAWALE DATTATRAY TUKARAM
20	HARNAWAL SAKSHI ADINATH
21	HULGE RESHMA KASHINATH

22	JADHAV RAJSHREE MARUTI
23	JADHAV SANDESH TARACHAND
24	JADHAV SURAJ TATYABA
25	CHAITANYA RAJESH BHOSALE
26	CHOPADE PRANALI BALKRISNA
27	CHORMALE NIKITA BABAN
28	EDHATE POONAM NITIN
29	GHOLAP RUSHIKESH BHAUSAHEB
30	GONDE NEHA SIDDHAREDDI
31	HOLE MANOJ CHANGDEV
32	ITAHPE ADITYA YUVRAJ
33	JADHAV GANESH MOTIRAM
34	JAGTAP RADHIKA SURYAKANT
35	KALE PRATHMESH PRAKASH
36	KALE SHUBHAM RAHUL
37	KHEDKAR VISHWJEET ADINATH
38	LOHKARE DHANASHRI SAKHARAM
39	LONDHE PRAGATI SURESH
40	MANE RAHUL SUBHASH
41	MHASKE PRAGATI SAMBHAJI
42	SALUNKE SHRUTIKA NILKANTH
43	SATAV DIVYA TANAJI
44	SAWANT DIPALI BHAGWAT
45	SHAIKH ALI IMRAN
46	SHINDE PRATIKSHA PRATAP
47	SHITOLE SWAPNIL EKNATH
48	JADHAV OMKAR NARSINGRAO
49	KADAM JAYDUTT AMARNATH

50	KALANGE PRADNYA BABAN
51	KHAN AMAN SHERJADA
52	KOMAL LAXMAN SINGH
53	MAVALE SUYASH AJIT
54	MORE ANKITA KISHOR
55	MANDHAVE SUYOG SUDHAKAR
56	NIKAM LOKESH SUBHASH
57	OMKAR SHIRISH JOSHI
58	PATIL PRIYANKA MANOHAR
59	PHALLE SUPRIYA HIRACHAND
60	PRANAV RAMESH DHANDAR