NEW HORIZON COLLEGE OF

ENGINEERING

DEPARTMENT OF ELECTRONICS AND COMMUNICATION **ENGINEERING**

20/09/2018

GUEST LECTURE

This is to inform to V semester students of ECE that the guest lecture is arranged on 22/09/18 at Chanakya Seminar Hall between 10AM to 11AM.

Topic to be delivered: Robotics: History, current Trends, Future

Name of the Speaker : Akshatha Pai

Designation

: Project Manager

Company

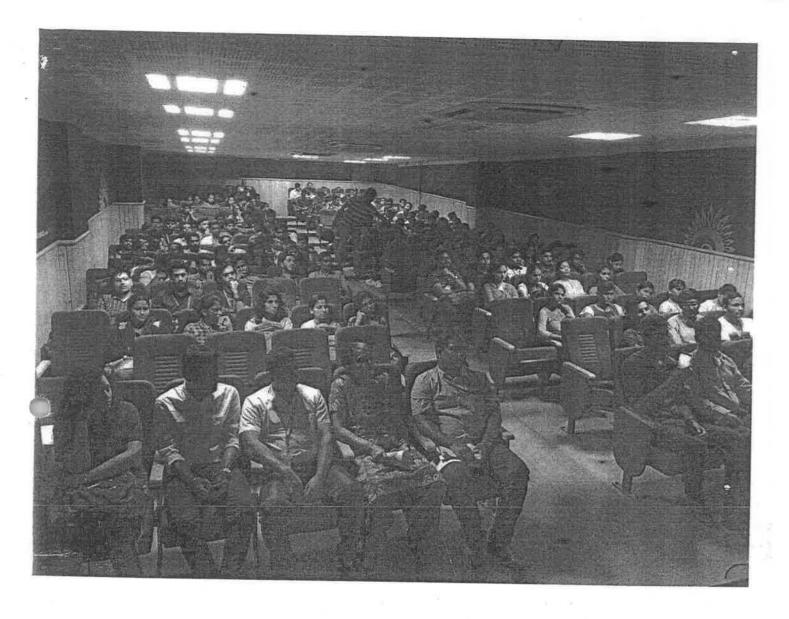
: Sirena Technologies

Respective subject teachers are hereby informed to be present at Chanakya Seminar Hall during the lecture.

All the faculty members are invited to attend the same without affecting the regular classes.

Guest Lecture Coordinator





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NEW HORIZON COLLEGE OF ENGINEERING DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING V Sem "A" Sec

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NEW HORIZON COLLEGE OF ENGINEERING DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING V Sem"B" Sec

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NEW HORIZON COLLEGE OF ENGINEERING DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING V Sem "C" Sec

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10	1NH15EC072	Pulibandla Harish	EXE	C2	1
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16	1NH15EC715	Manoj Chandrashekar	EXE	C1	
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21	1NH15EC759	Vishnu.N.U	EXE	C2	
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NAME OF THE EVENT/CLUB: Robots

FEEDBACK ON (Mention the topic): Nivo

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Comments/Remarks/Suggestions:

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Comments/Remarks/Suggestions:

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		Control Later Control

2. more on coding.
3. more interactions, Bublic test.

Name & USN No.(optional)

Kishore N (INH 16 EQ40)

Signature (optional) Kishole N

NAME OF THE EVENT/CLUB: Politics great lecture	
FEEDBACK ON (Mention the topic):	DATE: 00 0 10

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Comments/Remarks/Suggestions:

1. More interaction with students

2. More visual demonstrations

3.

Name & USN No. (optional) Kiran N(INH 16 EC 039)

Instruction: Please put a tick mark at the appropriate column.

Signature (optional) Koran

NAME OF THE EVENT/CLUB: Robotics

FEEDBACK ON(Mention the topic):

DATE: 22/09/18

Instruction: Please put a tick mark at the appropriate column.

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information to all. Thank you for in information cloud 2.

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NAME OF THE EVENT/CLUB: Robotic

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Comments/Remarks/Suggestions:

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Name & USN No.(optional)

REPORT ON ROBOTICS

A **robot** is a machine—especially one programmable by a computer capable of carrying out a complex series of actions automatically. Robots can be guided by an external control device or the control may be embedded within. Robots may be constructed to take on human form but most robots are machines designed to perform a task with no regard to how they look.

HISTORY OF ROBOTS

The word "robot" conjures up a variety of images, from R2D2 and C3PO of StarWars fame. Some people may alternatively perceive robots as dangerous technological ventures that will someday lead to the demise of the human race, either by outsmarting or outmuscling us and taking over the world, or by turning us into completely technology dependent beings who assively sit by and program robots to do all of our work. Russian-born American science-ction writer Isaac Asimov first used the word in 1942 in his short story "Runabout." Asimov had a much brighter and more optimistic opinion of the robot's role in human society than-did Capek. He generally characterized the robots in his short stories as helpful servants of man and viewed robots as "a better, cleaner race."

CURRENT TRENDS IN ROBOTICS

- 1. Robot Training: Al is making robots easier to train, which in turn makes them a more viable investment for smaller companies as it reduces the cost of installation, training and ongoing programming.
- 2. 3D Vision: Even the simplest tasks a robot performs will depend on 3D machine vision to feed data into AI technology
- 3. Cloud Robotics: Robotic deep learning using image classification and speech recognition often relies on huge datasets with millions of examples. Cloud robotics allows intelligence to be shared across all robots in a connected environment.

FUTURE TRENDS IN ROBOTICS

- 1. Adoption of Industrial Internet of Things (IIoT) Technology: Robots will increasingly deploy smart sensors at the edge of production to collect data previously inaccessible to manufacturers. This trend is currently underway and will lead to new levels of productivity and efficiency.
- 2. Industrial Cybersecurity as a Priority: As robots become more connected to internal systems for data collection, the cybersecurity risks increase. Manufacturers will be forced to address vulnerabilities in their processes and invest heavily in cybersecurity to ensure safe, reliable production.

- 4. Open Automation Architectures Will Be Implemented: As robotic automation gains widespread adoption, the need for open automation architectures grows. Large industry players will work with industry organizations to produce standards and open documentation that make robotic integration easier while improving product compatibility.
- 6. Collaborative Robots Will Continue to Grow in Popularity: Collaborative robots can work safely alongside humans and are often far cheaper than their industrial counterparts. As collaborative robots become more capable in tough industrial settings, they will see greater adoption by manufacturers with strict ROI requirements.