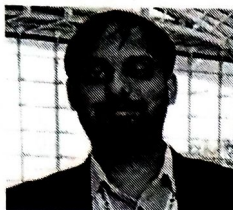


Report - Guest Lecture on  
**Humanoid Robots (H-boats)**



**Resource Person: Mr. P S V Kishan**

**Founder & CEO at H-Bots**

Hyderabad, Telangana State. India.

Lecture delivered on 18<sup>th</sup> Feb, 2020 for duration of 90 minutes, in ECE seminar Hall. Both 3<sup>rd</sup> and 4<sup>th</sup> year students were present in this lecture. Mr. Kishan focused on recent trends, basics and major application areas of Humanoid Robots.

Humanoid robots are now used as research tools in several scientific areas. Researchers study the human body structure and behavior (biomechanics) to build humanoid robots. On the other side, the attempt to simulate the human body leads to a better understanding of it. Human cognition is a field of study which is focused on how humans learn from sensory information in order to acquire perceptual and motor skills. This knowledge is used to develop computational models of human behavior and it has been improving over time. Although the initial aim of humanoid research was to build better orthosis and prosthesis for human beings, knowledge has been transferred between both disciplines. A few examples are powered leg prosthesis for neuromuscularly impaired, ankle-foot orthosis, biological realistic leg prosthesis and forearm prosthesis.

Besides the research, humanoid robots are being developed to perform human tasks like personal assistance, through which they should be able to assist the sick and elderly, and dirty or dangerous jobs. Humanoids are also suitable for some procedurally-based vocations, such as reception-desk administrators and automotive manufacturing line workers. In essence, since they can use tools and operate equipment and vehicles designed for the human form, humanoids could theoretically perform any task a human being can, so long as they have the proper software. However, the complexity of doing so is immense.


They are also becoming increasingly popular as entertainers. For example, Ursula, a female robot, sings, plays music, dances and speaks to her audiences at Universal Studios. Several Disney theme park shows utilize animatronics robots that look, move and speak much like

human beings. Although these robots look realistic, they have no cognition or physical autonomy.

Humanoid robots, especially those with artificial intelligence algorithms, could be useful for future dangerous and/or distant space exploration missions, without having the need to turn back around again and return to Earth once the mission is completed.

The Total Number of students participated in the lecture are 120 members. In the end Mr. Kishan clarified the queries posed by the students.



  
Head of the Department

*Head of the Department*  
Electronics & Communication Engineering  
Nalla Narasimha Reddy Education Society's  
Group of Institutions - Integrated Campus  
Chowdareguda(VIII), Ghatkesar (Mdl), R.R.Dist 500 089