ARTIFICIAL INTELLIGENCE

THE QUEST FOR THE
ULTIMATE

HELP IN MANAGEMENT

'A' GRADE
NAAC Re-accredited
(3rd Cycle)

NES RATNAM COLLEGE OF ARTS, SCIENCE AND COMMERCE.

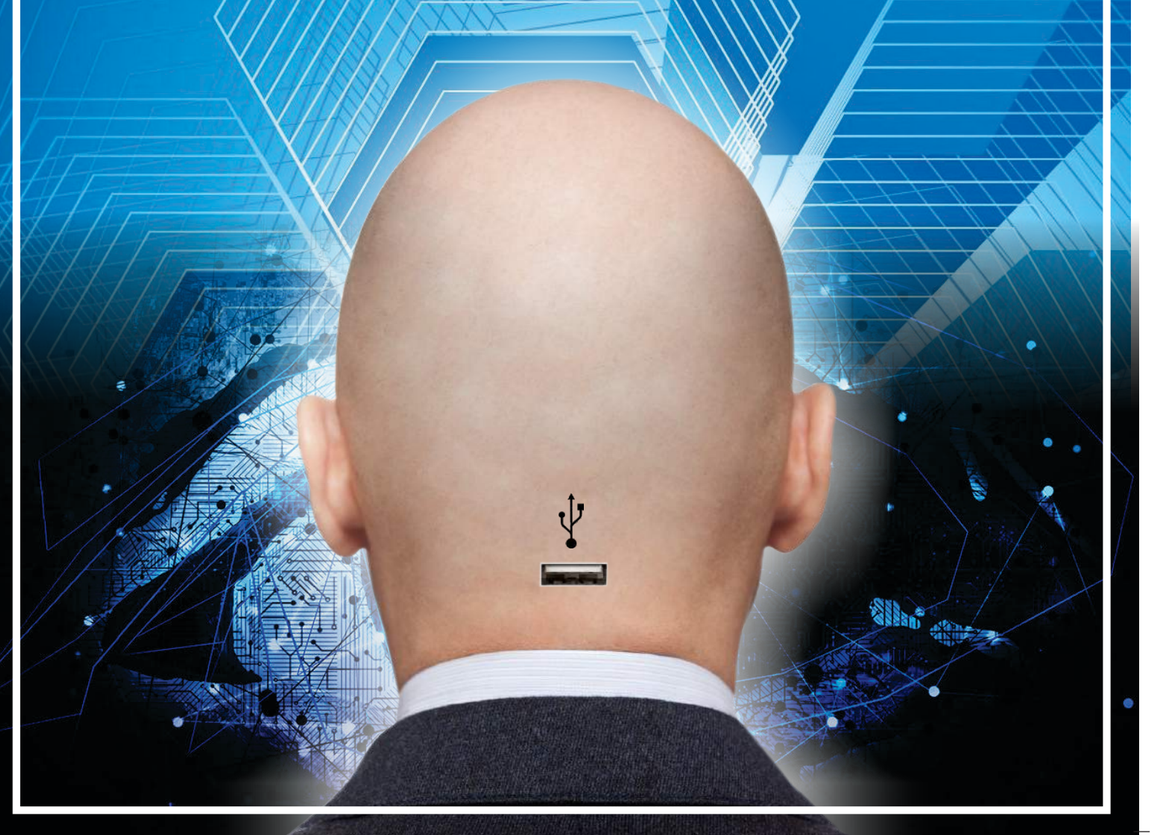
University of Mumbai
Best College Award
Urban Area
2012-14

DOSSIER
Information Unleashed

Academic Year : 2018-19

10th Edition

Artificial Intelligence



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Glimpses

Rendezvous Club

Manzil

Manzil

A one day inter-collegiate management fest Manzil- The Ultimate Destination organized by B.M.S. & B.Com(Banking & Insurance) Departments was inaugurated at the college premises on 8th January,2019.

The Chief Guest at the inaugural, Dr.R. Varadarajan, Founder President of NES & SVB Group of institutions congratulated the B.M.S. & B.Com(Banking & Insurance) Departments for organizing such a mega event with a theme "Karyaneeti", which involved participants from almost 20 colleges. He appreciated the faculty members and students for the laudable efforts. He was of the view that today's generation should try to be entrepreneurs who should plan and design the action to achieve a long-term goal.

Ratnam College firmly believes success of any institute depends on how students perform and interact at portals of corporate world. So to groom their personality, to cope up with the challenges various exciting management events namely Research Paper Presentation, Workshop on Time Management, Jugad(Crisis Management) & Product Paradox (Product Launch) were held at different venues simultaneously. There were more than 200 participants making it a spectacular extravaganza.

Veteran experts in their respective fields had obliged our request for judging the above events as external referees – Dr. Shaukat Ali & Mr. Mukesh Chunilal Kanojia for Research Paper Presentation and CA Girish Ramnani for Product Paradox. Also we had Ms. Pratishta Shah as resource person for Workshop on Time Management.

The college witnessed colors of participation, enthusiasm & potential. All the participants did phenomenal job. Manzil has truly lived up to its reputation of being the best & bringing out the best. Finally the fest emerged as true reflection of spectacular teamwork.

About Us

A visionary, Dr. R. Varadarajan founded the National Education Society (NES) on April 14th, 1963 with the mission of providing school and college education to children of middle and lower-middle-class families in the relatively underdeveloped suburb of Bhandup in Mumbai. Today, 55 years later, National Education Society along with the sister trust, Saraswati Vidyabhavan (SVB), founded in 1983 is a prominent landmark in Bhandup, Mulund, and Dombivli, the suburbs of Mumbai. The group has 62 constituent institutions imparting quality education to over 45,000 students.

The Ratnam College of Arts, Science and Commerce, one of the 62 institutes under the umbrella of NES/SVB group was founded on 11th July 1983. Affiliated to the University of Mumbai, the college has grown rapidly in a short span of 35 years, creating a niche for itself in the field of education in Mumbai. The college has been the recipient of ISO 9001:2000 certification in 2002 and has also been accredited with 'A' grade by NAAC in February 2004. In the year 2011 college has been re-accredited with an 'A' Grade by NAAC. In the year 2015, the college has been certified the Best College Award by the Mumbai University for the academic year 2013-2014. Our college with continuous self-improvement has received the great fillip with the 'A' grade reaccreditation third cycle from NAAC, UGC in July 2017.

Recognizing the contribution made by the college in improving the standard of the community surrounding its complex, Municipal Corporation of the Greater Mumbai has renamed the Bhattipada Road as NES Ratnam College Marg. The college offers besides the main streams, degree courses in Management course was to meet the demand of capable professionals in the market and also to enhance the professional abilities of today's generation and stretch their mission and horizon.

Ratnam College family believes that "No institution can possibly survive if it needs geniuses or supermen to manage it. It must be organized in such a way as to be able to get along under a leadership composed of average human beings".

Editors Desk

Dear Readers,

Zzz... Zzz... Zzz...

Wait! Wait! This isn't a sleeping human, it's a robot on power saving mode.

Yes, you heard it right! This is another Master Piece to the kitty of departmental magazine- DOSSIER.

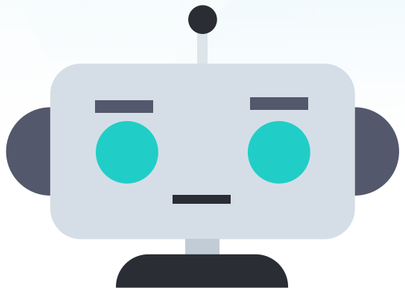
This is the 10th edition of Dossier, we are in double digits! And this year we are presenting you a creative magazine on ARTIFICIAL INTELLIGENCE.

From inventing tools for hunting animals, we have invented tools which hunt down all the work done by humans, replacement is Artificial Intelligence.

This edition not only gives you valuable information on A.I but also provides fun facts, puzzles, glimpses of Academic Year for an all-around experience.

So, what are you waiting for?

Rush to enter the world of future.



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Rendezvous

The BMS Management club 'Rendezvous' organized the intra collegiate activity on 9th January, 2019.
Two Events were conducted in which students from every stream Science, Commerce, Arts & Self- Financing courses participated. The names of the events are as follows :

Product Mash

- Student Event Incharges:
  1. Shubo Bera (T.Y.BMS)
  2. Saira Chaudary. (S.Y.BMS)
  3. Anjali Patil (F.Y.BMS)
- Rounds : **3**
- No. of Teams :
  43 (2 per team)

Winners

Position	Name	Class
First	Omkar Gaikwad Gaurav Satam	F.Y.BMS
Second	Kirtan Thakkar Vivek Singh	S.Y.BMS
Third	Namrata Ghosh Suman Paul	F.Y.BCOM

Blind Riders

- Student Event Incharges:
  1. Apeksha Shinde. (T.Y.BMS)
  2. Megha Rawat (S.Y.BMS)
  3. Murthy Padaiyachi (F.Y.BMS)
- Rounds : **3**
- No. of Teams :
  25 (2or 3 per team)

Winners

Position	Name	Class
First	Divya Poojari Harshada Choudhari	T.YBMS
Second	Kartik Bangera Theevigan Ganesh	T.YBMS
Third	Merlin Nadar Pavitra Koliyar	T.YBMS

Did you know

- Artificial Intelligence can repair itself.
- Many products that you buy online are suggested by Artificial intelligence.
- Artificial intelligence has crushed all human records in the puzzle game "2048," achieving a high score of 839,732 and beating the game in only 973 moves without using any undo's.
- Most Artificial Intelligence is female voiced.
- About 38% of consumers believe that Artificial Intelligence will improve customer service, according to Page.
- The share of jobs requiring Artificial Intelligence has increased by 450% since 2013, per Adobe.
- Around the globe, robot imports have increased from around 100,000 in 2000 to roughly 250,000 in 2015, according to (IDC).
- Only 15% of enterprises are using AI as of today, but 31% are expected to add it over the coming 12 months, according to Adobe.
- The number of active startups has increased by 1400% since 2000, as per Stanford University.
- The three most in-demand skills are Machine Learning (ML), Deep learning (DL) and Natural Language Processing (NLP).

Prajakta Sankpal
SYBMS

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Evolution of Artificial Intelligence

In the first half of the 20th century, science fiction familiarized the world with the concept of artificially intelligent robots.

→ 1949

Before 1949 computers lacked a key prerequisite for intelligence: they couldn't store commands, only execute them.

→ Five years later

The Logic Theorist was designed. It's considered by many to be the first artificial intelligence program.

→ 1957 - 1974

Artificial Intelligence flourished. Computers could store more information and became faster, cheaper and more accessible.

→ 1975–Till Date

The application of artificial intelligence in this regard has already been quite fruitful in several industries such as technology, banking, marketing and entertainment.

→ Future

One could imagine interacting with an expert system in a fluid conversation, or having a conversation in two different languages being translated in real time. In the long term, the goal is general intelligence,which is a machine that surpasses human cognitive abilities in all tasks.

Vivek Singh
SYBMS

The Manager

A sales representative, an assistant and their manager are walking to lunch when they find an antique oil lamp. They rub it and a Genie comes out. The Genie says, “I'll give each of you just one wish."

"Me first!" says the assistant. "I want to be in the Bahamas, driving a speedboat, without a care in the world." Poof! She's gone.

"Me next!" says the sales representative. "I want to be in Hawaii, relaxing on the beach with my personal masseuse, an endless supply of piña coladas and the love of my life." Poof! He's gone.

“OK, you're up," the Genie says to the manager. The manager says, "I want those two back in the office after lunch."

Moral: Always let your boss have the first say.

Frog & Two Geese

A frog asked two geese to take him south with them. At first they resisted; they didn't see how it could be done. Finally, the frog suggested that the two geese hold a stick in their beaks and that he would hold on to it with his mouth.

So off the unlikely threesome went, flying south over the countryside. It was quite a sight. People looked up and expressed great admiration at this demonstration of creative teamwork.

Someone said, "It's wonderful! Who was so clever to discover such a fine way to travel?" Whereupon the frog opened his mouth and said, "It was I," as he plummeted to the earth.

Moral: There is no "I" in team.

Praful Sharma
SYBMS

Words from Alumnus

ARTIFICIAL INTELLIGENCE

Artificial Intelligence has proved to be the biggest and the greatest invention of 21st Century. Artificial Intelligence is also known as Machine Learning Technology. Examples that most of you all will connect to is, “SIRI” from the iPhone world / “Google Assistant” for all the android users and for the Marvel Universe Fans... “JARVIS” from The Iron Man.

Machines have made our lives simple and comfortable yet it was necessary for machines to become smarter and intelligent with time. Artificial Intelligence (AI) has proved to be beneficial for everyone. AI has been implanted into many devices like Speakers, Mobile Phones, Computers etc. AI has also improved security by adding Facial Recognition, Biometric Fingerprint Scanners, Iris Scanners and many such complex systems making it almost impossible for others to spy or use our personal belongings and data.

Although machines are getting smarter day by day we should not forget, how smart and capable the human brain is. Machine learning would not have been possible without the human brain. I believe that the only limiting factor controlling our potential energy is the thing in our head, soinstead of completely depending on machines, we should keep faith in ourselves and use our brains to make a better brighter future.

Rohit Khatwani
ALUMNUS
A.Y 2017-18

How AI helps us make sense of real world

Our world seems to be increasingly volatile. Geopolitical events occur that we can't believe, global protest movements seemingly emerge from nothing, and new technology comes online every week. Events unfold at a pace and complexity that we as humans can't comprehend.

However, the world is actually not as chaotic as it can sometimes feel.

There are patterns around us, but we can't see them because we're biologically constrained by a limit to the volume, speed, and complexity of information that we can understand. Scientists find that when we remove these human limitations and employ machine intelligence to process data at a super-human scale, then structure and patterns emerge. Chaos gives way to clarity. Patterns emerge in other complex systems if we train machines to process, read and understand enormous volumes of information.

Machines will reduce the cost of curiosity

The most interesting thing about Artificial Intelligence is not its ability to mimic human intelligence, but its ability to see the world differently than us. Machines are a different kind of intelligence, and as such, they see and understand things that we cannot. The key is for these machines to teach us what they understand and allow machines to share their insights with us.

For example, what if you wanted to quickly grasp the most important events in the women's rights movement of the last year. While human precision is high, our recall is not. You might be able to recite a handful of events or people associated with the movement, but you would likely miss many details of the key events, stats or people that shape the entire narrative. If you were to set out to do research, it could take you weeks to sort through all of the data.

Machines can do all of this in minutes. Our software was able to mine all of the 33,000 English-language documents in our data set associated with the women's rights movement. Using machine-learning algorithms, Primer identified, timestamped, described and geo-located all of the events happening around the globe.

Shwet Gohil
TYBMS

3 AI in Jobs

Artificial intelligence is expected to disrupt the status quo and render many jobs obsolete over the coming years. Although many welcome this technological advancement, there is an underlying fear of job security. The Artificial Intelligence industry is expected to create just as many jobs as it displaces. The effect of the introduction of Artificial Intelligence technology will vary across industries. If you are in the information technology sector, buckle up because the future is exciting — and get ready to feast on these already in-demand IT positions.

According to the PwC report, Artificial Intelligence and related technologies will eliminate up to 7 million jobs in the UK in 20 years. However, the Artificial Intelligence sector is expected to create 7.2 million jobs over the same period.

The report noted that the health and social sector would benefit the most from the rise of Artificial Intelligence with the creation of 34 percent more jobs, while only 12 percent of existing jobs will be lost. On the other hand, the manufacturing sector will record the most losses with about 30 percent of existing jobs going obsolete, and just 5 percent more jobs created.

4 Most in-demand IT positions in Artificial Intelligence

Machine learning engineer

This job involves developing complex programs using predictive models. The goal of the machine learning engineer is to create programs that can learn and apply that knowledge in required situations without specific instructions. Robotic scientist Machine learning is a crucial part of Artificial Intelligence and is already changing our lives.

Data scientist

A data scientist is responsible for collecting vast amounts of data and analyzing it using Artificial Intelligence technology to gain insight and predict trends. In the future, data scientists are expected to play a role in fueling the growth of companies — particularly those that depend on data to make important decisions. To put it plainly, a data scientist is a problem solver

Research scientist

This job involves using deep learning, graphical models, and other Artificial Intelligence tools to solve problems. An ideal research scientist is a person who has a knack for gathering intelligence and using technology to improve performance.

Computer vision engineer

A computer vision engineer is responsible for creating software and algorithms to improve the maneuverability of robots and the automation of vehicles. To be a computer vision engineer, you need advanced mathematical skills as well as a background in mechanical engineering and computer science.

Kirtee Arke
FYBMS

8 Auto wheels & Kings satisfaction

Artificial Intelligence-based systems will become a standard in new vehicles especially in these two categories:

1. Infotainment human-machine interface, including speech recognition and gesture recognition, eye tracking and driver monitoring, virtual assistance and natural language interfaces.

2. Advanced Driver Assistance Systems (ADAS) and autonomous vehicles, including camera based machine vision systems, radar-based detection units, driver condition evaluation and sensor fusion engine control units (ECUs).

Deep learning technology, which is a technique for implementing machine learning (an approach to achieve Artificial Intelligence), is expected to be the largest and the fastest-growing technology in the automotive Artificial Intelligence market. It is currently being used in voice recognition, voice search, recommendation engines, sentiment analysis, image recognition and motion detection in autonomous vehicles.

Umang Katira
TYBMS

Artificial Intelligence in Customer Service:

At the Commercial Bank of Dubai, a virtual customer assistant named Sara is available 24/7 to assist visitors in filling out forms and getting up to date answers on saving and investing. Moreover, you don't need to write your questions. You can just talk to Sara, the virtual assistant. From emotion recognition to chatbots, the use of artificial intelligence in banking has become a major field of study in itself. The impact of implementing AI in banking has been a major reduction in resource costs as well as efficiency. The virtual assistant is available 24 X 7 and has answers to the most asked questions. Aldebaran Robotics has gone a step beyond and has implemented Nao (a humanoid robotic companion) which implements a similar scenario by talking to the customer in person.

Vrushabh Pawani
TYBMS

7 Mind Over Splatter

1] Who manufactured Sophia?
a) Rand Corp
b) Peremeterx
c) Stark Industries
d) Hanson Robotics

2] When was Sophia activated?
a) 14, February 2016
b) 18 June 1013
c) 23 January 2017
d) 4 April 2015

3] In the movie Terminator, government automates the defense network with which A.I?
a) Microsoft
b) Jarvis
c) Automata
d) Syknet

4] Wall-E was programmed for what purpose?
a) Surveying space
b) Protecting John Connor
c) Cleaning up garbage
d) Fighting against Ultron

5] Disney's Bay Max was introduced in which movie?
a) Star Wars
b) Inside Out
c) Big Hero 6
d) Incredibles

6] What was originally called the "Imitation Game" by its creator?
a) The Turing test
b) LISP
c) The logic theorist
d) Cybernetics

7] Decision support system is designed to help managers make:
a) Budget projection
b) Visual presentation
c) Business decisions
d) Vacation schedules

8] When talking to a speech recognition program, the program divides each second of your speech into 100 separate:
a) Codes
b) Phonemes
c) Samples
d) Words

9] Which particular generation of computers is associated with artificial intelligence
a) Third
b) Fourth
c) Seventh
d) Fifth

Answers : 1] Hanson Robotics 2] 14, February 2016 3] Syknet 4] Cleaning up garbage 5] Big Hero 6 6] The Turing test 7] Business decisions 8] Samples 9] Fifth

Kevin Poly
SYBMS

4 Paths in AI

The world has entered into the digital age, and technology has touched every part of the human life, whether it is business, communication, travel, health, or education. The global education system has taken it hands-on and the implications of advanced technology have created wonders in this field. From Artificial Intelligence and Machine Learning to automation and digitization, the global learning sector has been among the segments most benefited from technology.

The sensational rise of internet and popularity of computers made the ground for the first big change in the Indian education system, and now the time is ripe again for the revolutionary integration of AI in the Indian system.

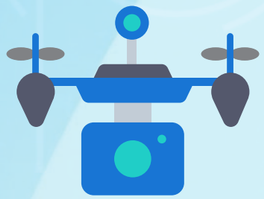
The Indian government has also taken certain initiatives to facilitate the national academia with Artificial Intelligence and advanced technology.

Online and Offline A.I. Courses

- PG Diploma in machine learning and Artificial Intelligence upgrade- IIT
- Artificial Intelligence nanodegree- Udacity
- Artificial Intelligence training- Zekelabs
- Master of Technology in Artificial Intelligence - University of Hydrabad

Hemant Kank
FYBMS

AI in Agriculture



Agriculture is seeing rapid adoption of Artificial Intelligence (AI) in terms of both agricultural products and in-field farming techniques. Cognitive Internet of Things provides some solutions as a service like a chatbot or other conversational platform to the farmers which helps them in their daily farming to reap the benefits of the services. Currently, Microsoft is working with 175 farmers in Andhra Pradesh to provide advisory services for sowing, land, fertilizers etc. resulting in 30% higher yield per hectare on an average. Given below are top areas where the uses of Internet of Things can benefit agriculture:

1. Growth driven by IOT

Huge volumes of data get generated every day in both structured and unstructured format related to historical weather pattern, soil reports, rainfall, pest infestation, images from Drones and so on. INTERNET OF THINGS SOLUTIONS analyses these data and provides solutions for a better yield and solutions like Rowbot (pertaining to corns) are pairing data-collecting software with robotics to prepare the best fertilizer for growing corns.

2. Identification of optimal mix for Agronomic products

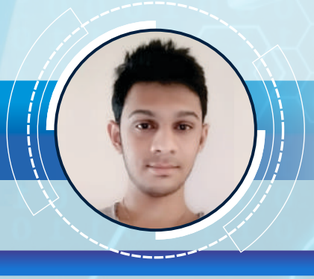
Based on multiple parameters like soil condition, weather forecast, type of seeds, and plague in a certain area and so on, cognitive solutions helps farmers giving choices of crops and hybrid seeds based on the farm's requirement, and data about successful farming in the past.

3. Health Monitoring of crops

Remote sensing techniques along with hyperspectral imaging and 3D laser scanning have the potential to bring in a revolutionary change in terms of how farmlands are monitored by farmers both from time and effort perspective.

4. Automation techniques in irrigation and enabling farmers

Machines trained in historical weather pattern, soil quality and kind of crops to be grown, can automate irrigation and increase overall yield helping farmers better manage their water problems.



Raj Savla
FYBMS

Cross your Mind & Laugh it out

C	F	B	A	I	B	Z	F	A	Q	Z	A	B	Y	C	G	Y	H	E	Z
G	C	D	L	D	O	A	Z	C	B	G	M	R	O	F	R	E	P	I	A
W	F	B	D	A	K	K	C	E	B	C	F	K	E	I	D	J	A	Y	E
S	J	E	I	T	C	E	H	V	D	D	X	V	Z	T	U	L	T	R	G
T	H	G	N	A	L	K	H	W	G	L	A	I	C	I	F	I	T	R	A
R	M	H	P	J	M	M	B	Z	F	F	Q	Y	A	O	J	H	E	D	U
G	N	E	U	R	A	L	G	O	R	I	T	H	M	B	M	E	R	C	G
J	K	V	T	C	P	B	U	O	X	E	O	P	W	X	O	P	N	S	N
N	O	I	C	K	Q	T	K	N	T	D	S	P	Q	M	K	G	L	T	A
Q	N	E	H	O	C	L	M	I	H	F	X	U	Y	Z	V	R	U	E	L
Q	S	L	S	O	U	R	C	E	L	J	N	N	I	V	L	F	A	G	X
S	P	P	M	Q	V	O	N	N	S	J	E	N	J	T	I	D	S	B	F
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N	C	M	P	X	X	G	Q	I	X	K	W	O	N	H	E	I	R	A	M
T	I	S	E	Y	E	M	T	P	L	Y	O	Z	W	N	X	Y	V	L	T
P	E	S	C	A	P	A	B	I	E	A	R	N	I	N	G	E	E	I	L
R	S	V	N	R	C	R	S	O	U	W	K	H	P	A	Q	U	R	M	X
W	U	Z	O	A	X	S	U	Q	P	A	C	C	U	R	A	C	Y	I	R
U	W	B	C	Y	V	V	W	R	W	A	T	J	L	O	Y	U	A	S	S
J	X	W	M	U	I	Z	X	U	M	M	Y	S	K	S	T	S	L	U	V

LETTERS USED

ALGORITHM
BLACKBOX
NEURAL
NETWORK
ARTIFICIAL
LANGUAGE
MACHINE
LEARNING
SOURCE
TEST
CONCEPT
ACCESS
OUTCOME
PERFORM
SERVER
RESULTS
DATA
PATTERN
CAPABLE
TRANSFER
ACCURACY
SPECIES
COMPLEX
INPUT
SIMILAR

Amit Purani
SYBMS

Human: What do we want ?
Computer: Natural language processing!
Human: When do we want it ?
Computer: When do we want what ?

Ben: How many robots does it take to screw in a light bulb ?
John: I haven' t a clue.
Ben: Three — one to hold the bulb, and two to turn the ladder!

Billy: What did the man say to his dead robot ?
Bob: What ?
Billy: "Rust in peace."

Q: What did the droid do at lunch time ?
A: Had a byte...

Q: Why shouldn't R2D2 be allowed in movies ?
A: He says so many foul words they have to bleep everything he says!

Q: Why was the robot feeling bad ?
A: It had a virus.

Anuj Kumari
FYBMS