



NAVGUJARAT COLLEGE OF COMPUTER APPLICATIONS

(MANAGE BY VIDYABHAVAN TRUST)

(AFFILIATED TO GUJARAT UNIVERSITY)

ASHRAM ROAD, AHMEDABAD-380014.

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SUBHASH CHANDRA BOSE



Name	Subash Chandra Bose
Born	23 January 1897 Cuttack, Orissa Division, Bengal Province, British India
Died	18 August 1945 (aged 48) Taihoku, Japanese Taiwan
Known for	Figure of Indian independence movement
Title	President of Indian National Congress (1938) Head of State, Prime Minister, Minister of War and Foreign Affairs of Provisional Government of Free India based in the Japanese-occupied Andaman and Nicobar Islands (1943–1945)

[Source : https://en.wikipedia.org/wiki/Subhas_Chandra_Bose]

Quotes of Subhash Chandra Bose

"Freedom is not given, it is taken".

"One individual may die for an idea; but that idea will, after his death, incarnate itself in a thousand lives. That is how the wheel of evolution moves on and the ideas and dreams of one nation are bequeathed to the next".

"You give me your blood and I will give you Independence!"

NATIONAL ARMY DAY [15TH JANUARY 2017]



Army Day in India is celebrated with great enthusiasm every year on 15th of January. It has been started celebrating to respect the Lieutenant General of India, K. M. Cariappa (Kodandera Madappa Cariappa) who was the first Indian Army's Commander-in-Chief. It is celebrated every year at all the Army Command headquarters and national capital by organizing army parades including many other military shows.

Army day 2017

Army day 2017 will be celebrated on 15th of January, at Sunday. It would be celebrated as 69th Indian Army day in the national capital.

Why Army Day is Celebrated

It is celebrated to pay homage and salute to the courageous and brave Indian soldiers who have been sacrificed their lives for protecting the country. Indian Army General Kodandera Madappa Cariappa was succeeded the British Army General Roy Butcher and became the first Commander-in-Chief of the independent India. Indian Army soldiers are always ready to fight with all the hard times at Indian borders as well as with the natural disasters. They courageously face all the challenges and difficulties come their way to save the nation and people.

Army Day Celebration

Indian army plays a great and big role during the disaster situations in the country as they are dedicated to the country to become the War Winning Team. The day was decided to be celebrated as the army day in India to start paying tribute to the sacrificed Indian army soldiers at the "Amar Jawan Jyoti" at India Gate in New Delhi. After paying homage, an excellent parades including military shows takes place to indicate the new technologies and accomplishments in the Indian Army. Bravery awards including Unit credentials and Sena Medals are distributed at this great occasion. At the Army Day celebration in Jammu and Kashmir, serving army personnel get the bravery and famed service awards (Sena medals, Vishist Seva medals and etc). The day has been marked to memorize the daring and bold Indian soldiers who lost their lives while protecting their nation.

Army Day Parade

Army day parade during the army day celebration is carried out by the Indian army soldiers (Indian army bands) which involves the exhibition of BLT T-72, T-90 tanks, Brahmos Missile, carrier Mortar Tracked Vehicle, 155 MM Soltum Gun, Advanced Light Helicopters of the Army Aviation Corps and etc. Serving Indian armies take a pledge at this day to maintain their service and protect the nation from enemies whether they are foreign or domestic. [Source : <http://www.indiacelebrating.com/events/army-day/>]

INNOVATION.....

Learning words from pictures System correlates recorded speech with images, could lead to fully automated speech recognition.



Speech recognition systems, such as those that convert speech to text on cellphones, are generally the result of machine learning. A computer pores through thousands or even millions of audio files and their transcriptions, and learns which acoustic features correspond to which typed words.

But transcribing recordings is costly, time-consuming work, which has limited speech recognition to a small subset of languages spoken in wealthy nations.

At the Neural Information Processing Systems conference this week, researchers from MIT's Computer Science and Artificial Intelligence Laboratory (CSAIL) are presenting a new approach to training speech-recognition systems that doesn't depend on transcription. Instead, their system analyzes correspondences between images and spoken descriptions of those images, as captured in a large collection of audio recordings. The system then learns which acoustic features of the recordings correlate with which image characteristics.

"The goal of this work is to try to get the machine to learn language more like the way humans do," says Jim Glass, a senior research scientist at CSAIL and a co-author on the paper describing the new system. "The current methods that people use to train up speech recognizers are very supervised. You get an utterance, and you're told what's said. And you do this for a large body of data.

"Big advances have been made — Siri, Google — but it's expensive to get those annotations, and people have thus focused on, really, the major languages of the world. There are 7,000 languages, and I think less than 2 percent have ASR [automatic speech recognition] capability, and probably nothing is going to be done to address the others. So if you're trying to think about how technology can be beneficial for society at large, it's interesting to think about what we need to do to change the current situation. And the approach we've been taking through the years is looking at what we can learn with less supervision."

Joining Glass on the paper are first author David Harwath, a graduate student in electrical engineering and computer science (EECS) at MIT; and Antonio Torralba, an EECS professor.

Visual semantics

The version of the system reported in the new paper doesn't correlate recorded speech with written text; instead, it correlates speech with groups of thematically related images. But that correlation could serve as the basis for others.

If, for instance, an utterance is associated with a particular class of images, and the images have text terms associated with them, it should be possible to find a likely transcription of the utterance, all without human intervention. Similarly, a class of images with associated text terms in different languages could provide a way to do automatic translation.

Conversely, text terms associated with similar clusters of images, such as, say, "storm" and "clouds," could be inferred to have related meanings. Because the system in some sense learns words' meanings — the images associated with them — and not just their sounds, it has a wider range of potential applications than a standard speech recognition system.

To test their system, the researchers used a database of 1,000 images, each of which had a recording of a free-form verbal description associated with it. They would feed their system one of the recordings and ask it to retrieve the 10 images that best matched it. That set of 10 images would contain the correct one 31 percent of the time.

"I always emphasize that we're just taking baby steps here and have a long way to go," Glass says. "But it's an encouraging start."

The researchers trained their system on images from a huge database built by Torralba; Aude Oliva, a principal research scientist at CSAIL; and their students. Through Amazon's Mechanical Turk crowdsourcing site, they hired people to describe the images verbally, using whatever phrasing came to mind, for about 10 to 20 seconds.

For an initial demonstration of the researchers' approach, that kind of tailored data was necessary to ensure good results. But the ultimate aim is to train the system using digital video, with minimal human involvement. "I think this will extrapolate naturally to video," Glass says.

Merging modalities

To build their system, the researchers used neural networks, machine-learning systems that approximately mimic the structure of the brain. Neural networks are composed of processing nodes that, like individual neurons, are capable of only very simple computations but are connected to each other in dense networks. Data is fed to a network's input nodes, which modify it and feed it to other nodes, which modify it and feed it to still other nodes, and so on. When a neural network is being trained, it constantly modifies the operations executed by its nodes in order to improve its performance on a specified task.

The researchers' network is, in effect, two separate networks: one that takes images as input and one that takes spectrograms, which represent audio signals as changes

of amplitude, over time, in their component frequencies. The output of the top layer of each network is a 1,024-dimensional vector — a sequence of 1,024 numbers. The final node in the network takes the dot product of the two vectors. That is, it multiplies the corresponding terms in the vectors together and adds them all up to produce a single number. During training, the networks had to try to maximize the dot product when the audio signal corresponded to an image and minimize it when it didn't.

For every spectrogram that the researchers' system analyzes, it can identify the points at which the dot-product peaks. In experiments, those peaks reliably picked out words that provided accurate image labels — "baseball," for instance, in a photo of a baseball pitcher in action, or "grassy" and "field" for an image of a grassy field.

In ongoing work, the researchers have refined the system so that it can pick out spectrograms of individual words and identify just those regions of an image that correspond to them.

"Possibly, a baby learns to speak from its perception of the environment, a large part of which may be visual," says Lin-shan Lee, a professor of electrical engineering and computer science at National Taiwan University. "Today, machines have started to mimic such a learning process. This work is one of the earliest efforts in this direction, and I was really impressed when I first learned of it."

"Perhaps even more exciting is just the question of how much we can learn with deep neural networks," adds Karen Livescu, an assistant professor at the Toyota Technological Institute at the University of Chicago. "The more the research community does with them, the more we realize that they can learn a lot from big piles of data. But it is hard to label big piles of data, so it's really exciting that in this work, Harwath et al. are able to learn from unlabeled data. I am really curious to see how far they can take that." [Source : <http://news.mit.edu/2016/recorded-speech-images-automated-speech-recognition-1206>]

INDUSTRY VISIT [SEM 6]

NGCCA: BCA students at VNurture [Wellknown IT Company] campus on 24th Dec 2016. It was more than 4 hours session conducted by experts in the following pattern of topics.

- + What is IT industry and where it is moving
- + Grass root approach being taken by Nurture for forthcoming professionals
- + What is importance of a logic building
- + What is real industry process to design & develop any desktop or Mobile or Web application.
- + What is software testing and its importance in the industry
- + Different career options within IT
- + OOPS concepts

- + How applications developed in Java , Android , iOS & PHP in Agile environment
- + Python and latest trends in IOT space and/or Google Glass.



GROUP DISCUSSION 23-12-2016

NGCCA has arranged group discussion on **"Is cashless society is possible in India or not?"** on 23rd December 2016.

Almost 60 students have actively participates in Group Discussion and shared their views on cashless India. They discussed on advantages, disadvantages and the problems that India facing to implement cashless society.

They also share their experiences of demonitization and also gave various suggestions how we can implement cashless society in India.





**ANIMATION WORKSHOP
26TH TO 31ST DECEMBER 2016**

NGCCA have organized 6 days workshop on Animation with the help of RAM Animation, Ahmedabad. IT expert share their thoughts and knoweldge regarding Animation Field.
+ How to create Character Animation
+ How to developed movie or advertisement, games etc.

**SEMINAR ON
HOW TO DEVELOPED ELOCUTION ART
29TH DECEMBER 2016**

NGCCA have organized 1 day seminar on how to developed elocution art with the help of "Indian Society of Education" on 29th december 2016.
+ Importance of Elocution
+ Need of Elocution
+ Future generation : Group Discussion

**SEMESTER-6
Project Submission
On following dates there will be project
presentation with mention details:**

No.	Date	Project presentation Details
1	12/1/2017	+ Master page + Menus + All Master screen GUI layout with validations
2	31/1/2017	+ Database Connectivity with Master Forms + Transaction Screen GUI Layouts
3	13/2/2017	+ Transaction Forms Database Connectivity All master reports
4	27/2/2017	+ Final Project Evaluation.
5	2/3/2017 (Last Date)	+ Complete project report submission with hard copy , CD(project code, softcopy of ppt and doc) and PPT. 1 hardcopy – college copy Candidate copies per candidate.

**SEMINAR ON CLOUD COMPUTING
29TH DECEMBER 2016
[SEM 2 & 4]**

NGCCA have organized 2 hours seminar on Networking and cloud computing. Mr. Hiren Patel share their views and live demo regarding subject. He discuss following points :
+ Concept of Cloud Computing.
+ How benefit for us and IT industry.
+ Live Demo

**SWACHHATA ABHIYAN
28TH DECEMBER 2016**

Ahmedabad Municipal Corporation organize awareness camp for Swachhata for youth and actively participate for better Green City - Clean City, Ahmedabad. Dr. Minaben Shah was conduct seminar for Sem4 and sem 6 students.



UNIT EXAM : UNIT -1 AND UNIT-2

DATE	TIME	SEM-2	SEM-4	SEM-6
6/2/2017	12:00 TO 2:00	Adv. C	DBMS -2	ASP.NET
	3:00 TO 5:00	HTML	VB.NET	DBA
7/2/2017	12:00 TO 2:00	DBMS-1	JAVA	E-COM
	3:00 TO 5:00	MFCS	OOAD	PHP

UNIT -3 AND UNIT-4

DATE	TIME	SEM-2	SEM-4	SEM-6
6/3/2017	12:00 TO 2:00	Adv. C	DBMS -2	ASP.NET
	3:00 TO 5:00	HTML	VB.NET	DBA
7/3/2017	12:00 TO 2:00	DBMS-1	JAVA	E-COM
	3:00 TO 5:00	MFCS	OOAD	PHP

: Upcoming Event : NAVRANG 2017

No	Event	Date	Time
1	Blind C Programming	11-1-2017	2:00 to 3:00
2	Website Design	11-1-2017	3:00 to 5:00
3	Mahendi	11-1-2017	3:00 to 5:00
4	Waste to best use only computer parts(group)	11-1-2017	2:00 to 3:00
5	Idea Presentation (group & individual)	12-1-2017	2:00 to 4:00
6	Poster Presentation (group & individual)	12-1-2017	4:00 to 5:00
7	Science Project Working model(group)	13-1-2017	2:00 to 3:00
8	Add made show	13-1-2017	3:00 to 5:00
9	Computer Assemble (group)	13-1-2017	3:00 to 5:00

Event Co-ordinator: Pro. Maulik Patel