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PAUSE & PONDER

"Be kind for everyone you meet is fighting a hard battle"

- **Plato**

Handwritten Manuscripts into printed, editable text – First kind of Database, City gets first-of-its-kind database to decode palm-leaf manuscripts

Hyderabad: Researchers at IIITH (International Institute of Information Technology, Hyderabad) have created the first-ever large-scale database of ancient palm-leaf manuscript images that can identify and label different regions of the document.

They built an algorithm that can read and convert complex, handwritten manuscripts into printed and editable text and trained deep neural networks to automatically identify and isolate different regions of the manuscript images. "Ayurveda and Yoga may have been among the most popular and visible Indian exports to the west, but there exists many more documented shastras or texts in various fields of knowledge, from science and technology to wellness and ecology," said Ravi Kiran Sarvadevabhatla from the Centre for Visual Information Technology (CVIT), adding that it was the thought of making such a treasure trove more publicly accessible that drove him to embark on a project of cultural and historical importance.

Not only is it difficult to decipher the language on palm-leaf manuscripts, but the lines themselves are so densely packed and tricky to follow, he said.

For this purpose, he said they have obtained digitized manuscript images from two sources -- University of Pennsylvania's Rare Book and Manuscript Library and BHOOMI, an assorted collection of images sourced from multiple oriental research institutes and libraries across India with the help of manual annotations, trained deep neural networks to automatically identify and isolate different regions of the manuscript images.

Source | Business Line | 18th October 2019

Library of Congress Publishes the Digital Collections Management Compendium (DCMC)

Library of Congress to collate and assemble guidance and policy that guide or reflect the practices that the Library uses to manage digital collections.

This resource is primarily a policy resource for staff at the Library of Congress, but we are also sharing it openly and publicly as a resource for colleagues at other institutions."

The DCMC elements are organized into three main areas: **Digital Formats**, **Inventory and Custody**, and **Access**.

Access to DCMC | https://loc.gov/programs/digital-collections-management/about-this-program/?loclr=blogsig

MIT launches digital content library for workforce learning on emerging technologies

In the age of block chains, 3D printing, CRISPR-Cas9 — and the inevitable new technologies that are yet to emerge — today's workforce is struggling to keep up with the latest developments. For large companies and executives, finding resources for workers to learn from that are current, reputable, and unbiased can be challenging.

To address this unmet need, MIT has assembled a team of writers, educators, and subject matter experts from both academia and industry to power the Institute's newest online learning offering — a digital content library designed to help organizations keep their workforces apprised of the latest developments in technology and science. Known as MIT Horizon, the platform contains bite-sized articles, videos, and podcasts on emerging technologies, with early topics including additive manufacturing, artificial intelligence, block chain technology, and robotics.

"Technologies are advancing very rapidly, and we feel a responsibility at MIT to provide learning opportunities that can help today's workforce keep up with this pace of innovation," says Sanjay Sarma, MIT vice president for open learning. "With MIT Horizon, we aim to introduce more granular learning in a variety of formats that teams can easily consume."

A subscription-based service, MIT Horizon presents unbiased, up-to-date, accurate educational content together with an enterprise-friendly platform, usage analytics, ongoing user engagement support, and various professional services.

Developed for both technical and non-technical learners, content delivered on MIT Horizon is conceived of and created by MIT writers, faculty, and industry experts. Some content is licensed from MIT publishers, including MIT Press and MIT Sloan Management Review.

The goal of MIT Horizon is to help teams quickly understand and apply the latest developments in technology and science to their industry.

"This is a groundbreaking platform specially-designed for learning on emerging technologies," Sarma says. "We are thrilled to bring this offering to organizations in need of new learning opportunities, as it reflects our mission of expanding MIT's educational reach to millions of working professionals."

Source | https://scienceblog.com/

Search vs. Discovery: How Are They Different?

Google, Microsoft, et al continue to perfect their search engines – but too often search is not enough. The watchword today is "discovery" – where you don't just search for information, but information finds you.

Why is discovery better than search? One reason is because of the overload of data – both online and in-house. Searching for something, whether via Google or using scripts written by programmers that peruse huge data storage repositories, requires you to invest a great deal of time and effort in order to ferret out the results you really need from a huge amount of non-relevant data – because the context of what you are searching for is not always clear. Discovery – where a system proactively presents to you what you are really looking for based on the context of what you are doing or

searching for – is the Next Big Thing in data usage.

When you add context to search, you get discovery – a system where the data you need is delivered based on materials you are examining, where you are, what app you're using, the type of device you are using (i.e. screen size and input tools), whether you are moving or stationary, etc. Done this way, discovery saves a huge amount of time, effort, and resources over search. Search is fine for quick, specific answers, but awful at discovering and exploring new ideas. Discovery reveals worlds you didn't know existed.

What Discovery can Discover

When machine learning is applied to the process, the potential accuracy of a recommendation engine is enormous, with the engine figuring out that if you bought one product (ie, hot dogs) you would likely be interested in others (hot dog rolls, charcoal, soft drink six packs, beach toys, etc.).

The heart of such a discovery/recommendation engine is the "knowledge graph" which is a data graph that exhibits the relationships between topics. By examining the context, the engine "knows" that if you buy product A, there's a good chance you will need product B, C, etc. – and it will bring those results to you. Business intelligence tools, like PowerBI, also enable people to discover things from large amounts of data by using visualization to show patterns where just searching for data wouldn't reveal 'the big picture'.

A discovery system would also respond to location/usage context. For example, if you are using an AR headset (like Hololens) to repair something like an elevator, the system projects information relevant to the repair on the screen without having to search for it specifically. Other examples and contexts would include conversations on Slack or other connectivity applications: If you are engaged in a marketing discussion on an "upcoming company meeting" with a client, and someone in another department had a conversation on the same topic, the discovery system could suggest checking out that conversation.

The same could apply to any other activity in an organization – sales teams discovering work done by others on the same account in the past, engineers getting insight from other teams working on product design, finance departments being informed of the newest regulations regarding salaries and benefits, etc. Instead of being passive and becoming activated only when called upon – like search – discovery is proactive, delivering desired information when needed. That is the power of discovery – and that is what search should eventually evolve into.

Moving Towards Discovery: Practical Steps

How can that evolution take place? To "discover," a system needs to be able to understand what we are looking for and how it is going to be applied – supplying relevant information when it is called upon to do so, or even automatically, such as in the airplane repair context mentioned. To do that, a number of strategies could be applied, such as artificial intelligence or natural language processing.

Organizations really have no choice: With the amount of data set to grow to 175 zeta bytes by 2025 – 61% more

than in 2018 – finding data is going to become a greater challenge than ever. To keep organizations functioning, search must enter a new phase of presenting information before users even think to look for it: discovery.

Source | https://dataconomy.com

Are traditional libraries losing their charm & relevance in new India

The beauty of sitting in a library for hours, sometimes from one morning till the next, the occasional breaks over snacks followed by a discussion about some knotty topic, a walk through the stacks of encyclopedias and databases, or the sheer inspiration from those bending over books all around you… a library has a color and smell of its own.

Even in an era when most Indians are mobile data empowered, the fact is, for the seeds of learning to develop into knowledge and wisdom, an enabling environment plays a more important role.

Link| https://timesofindia.indiatimes.com/city/noida/are-traditional-libraries-losing-their-charm-relevance-in-new india/articleshowprint/71703567.cms

Science, math videos for kids in nine languages, courtesy IIT-B

Mumbai: Twenty-six students of the Indian Institute of Technology-Bombay (IIT-B) are creating educational audio-video content for Class 6 to Class 10 students in nine languages for free.

Every week, the students of the IIT-B's National Service Scheme (NSS) wing upload around two educational videos, in Science and Mathematics, on their YouTube channel – Open Learning Initiative (OLI). In August, the channel reached 1 lakh subscribers.

The videos are developed, designed and recorded by the IIT-B students in Marathi, Hindi, Malayalam, Kannada, Telugu, Odia, Tamil, Gujarati and Bengali.

"Going forward, we plan to expand the videos to more classes and subjects," said Vaibhav Chandan, department head, educational outreach of NSS, developing content for OLI.

He added that developing content for OLI is a three-pronged process. "The 15 first year volunteers of NSS create the content using textbooks. These are reviewed by the nine volunteers from the second year and two volunteers from the third-year. Then there is a final review conducted by the person uploading the video," he said.

The students were prompted to start the initiative in 2015 as there is a crucial dearth of free, educational content in regional languages.

Source | Hindustan Times | 4th November 2019

Four learning apps to make your kids learn faster

Here are some amazing learning apps with handy study material as per different school boards, practice test for competitive exams etc.

Source | Financial Express | 13th November 2019

Why the MBA needs a revamp

It's only been tinkered with when what's needed is an overhaul, says Great Lakes Dean

Suresh Ramanathan, Dean of the Great Lakes Institute of Management, believes that the MBA of today is like the Ambassador car of yore — sturdy and reliable, yet any improvement can only be mere tinkering. The MBA program too is seeing mere tinkering while the need of the hour is an overhaul.

Speaking recently at the Madras Management Association on 'Reimagining business education in a dynamic world', Ramanathan highlighted three issues with the MBA of today. "These are the result of a classic problem — change blindness. We fail to recognize gradual changes in the environment," he said.

The first issue is commoditization. A rush to capitalize on demand has led to the burgeoning of business schools, most of which have nothing new to offer. The uniform curriculum focuses on exposure to a wide range of functional areas in the first year and specializations in the second. "The result is 'strategic herding' — a tendency to copy from one another and an overall loss of value in industry," said Ramanathan. As a consequence, several B-schools are closing shop. The second issue is the focus on short-term outcomes. "Like it or not, business schools,

Suresh Ramanathan, Dean, Great Lakes Institute of Management

The final big issue Ramanathan flagged is the lack of resources for knowledge creation. India, he said, is woefully behind other countries in research, and despite confidentiality agreements, industry is reluctant to work with academia. "So academicians rarely provide usable insights to industry, and industry finds little utility in collaboration," he explained.

Ramanathan offered four key prescriptions, that are by no means exhaustive.

'Embrace customization'

Apart from a lack lustre job market, B-schools have to contend with online learning platforms and specialized program which offer to up skill young professionals in specific areas at a faction of the cost of most B-schools. B-schools can collaborate with industry to create specializations and certifications that meet specific needs," he elaborated.

'Need to celebrate diversity'

Over 70 per cent of a typical cohort are likely to be engineers. The lack of diversity breeds sameness in thought and reasoning, whereas businesses are shifting their recruiting philosophies to embrace diversity of thought, said Ramanathan.

'Focus on lifelong learning'

With rapid changes in the workplace, knowledge gained a few years ago may be obsolete. A shift in mindset to focus on relationships rather than transactions is vital. "Several leading schools around the world are trying to create program aimed at alumni so they can up skill or res kill themselves," said the Great Lakes Dean.

Platform approach

What is needed is a train-the trainer program, where the best talent can help train faculty who could then take on PhD students. Such a program would bring together leading academicians from around the world and industry partners who may share data or collaborate with faculty. "This may help overcome the need for heavy investments by individual schools," said Ramanathan."The trusted Ambassador is now a relic. It served its purpose admirably but it's time to herald a new standard in business education," Ramanathan concluded.

Source | Business Line | 14th November 2019

OpenCitations, DOAB and OAPEN and PKP latest services to earn SCOSS recommendation

The Global Sustainability Coalition for Open Science Services (SCOSS) is calling on the international scholarly community to support three vetted and vital open infrastructure services.

The services are:

1. The Directory of Open Access Books **(DOAB)**, a digital directory of peer reviewed Open Access books and Open Access book publishers; and Open Access Publishing in European Networks **(OAPEN)**, a growing repository of freely accessible academic books;
2. The Public Knowledge Project **(PKP),** a university initiative that creates open source software and services, including Open Journal Systems (OJS), which is used to publish more than 9,000 OA journals worldwide.
3. OpenCitations, a scholarly infrastructure service that provides open bibliographic and citation data.

Link | https://pralhad-fyilibrarian.blogspot.com/2019/12/opencitations-doab-and-oapen-and-pkp.html

Inkitt - authors can write and upload their manuscripts on Inkitt for free

https://www.facebook.com/E-Book-671272016239685/?ref=bookmarks

https://eboksinpdf.wordpress.com/2019/12/11/inkitt-authors-can-write-and-upload-their-manuscripts-on-inkitt-for-free/

Research begin here | New World Encyclopedia

For many, Wikipedia is the "go to" source of information, thanks to thousands of contributors and editors from all around the world. Still there are many instances where its pages carry uncorroborated data that has not yet been spotted by its editors. And this is where New World Encyclopedia comes in. Currently, it comprises thousand of articles that are intended for use by teachers and students who are concerned about quality and consistency. The website derives most of its core information from Wikipedia that is then subjected to careful editorial supervision by scholars. This result is cleaner, concise entries that are simple to

understand. Entries from Wikipedia are documented, cited and hyperlinked to the original article so that their complete history is available, articles not obtained from Wikipedia carries copyrights or licenses based on their origin.

Source| https://www.newworldencyclopedia.org

Amazon launches Audible Suno free app featuring short-stories in India

Amazon has introduced a new service called Audible Suno that offers free access to "hundreds of hours of audio entertainment, enlightenment and learning."

Audible Suno, which is exclusively available to users in India, features more than 60 original and exclusive episodes (of 20 to 60 minutes in length) in both Hindi and English languages. Audible, the world's largest seller and producer of audio content, said Suno is aimed at filling the "idle time" listeners have each day during their commutes and performing other daily chores.

The company says Audible Suno, available to users through a dedicated Android app and via iOS Audible app, is also free of advertisements.

"I've always been passionate about the transformative power of the spoken word, and I'm delighted to be able to offer this breadth of famous voices and culturally resonant genres with unlimited access, ad-free and free of charge," said Katz.

Who are these famous voices you ask? Here's the list: Amitabh Bachchan, Katrina Kaif, Karan Johar, Anil Kapoor, Farhan Akhtar, Mouni Roy, Anurag Kashyap, NeeleshMisra, Tabu, Nawazuddin Siddiqui, DiljitDosanjh, Vir Das and Vicky Kaushal.

Source | https://techcrunch.com

Centre launches app-based coding program for schoolchildren

New Delhi: Principal scientific adviser Vijay Raghavan's office on Monday launched a two-week training module titled CodeIndia on application-based programming for middle and intermediate level students across the country. Through CodeIndia, students will get to learn programming skills and develop an aptitude for building applications for various sectors like business, neuroscience, nuclear physics, artificial intelligence, aerospace and others.

The module will be taught by a group of specialists and students will also get to interact with experts from scientific organizations like Conseil Européen pour la Recherche Nucléaire (CERN), Geneva, Massachusetts Institute of Technology (MIT), Stanford University and others. It will be bi-lingual, conducted both in English and a regional language, depending on where the training is taking place.

Code India will be utilized to develop a model curriculum for the human resource development ministry to be later introduced in the curriculum.

The first school to implement Code India module is **Navodaya Vidyalaya in West Delhi. HTC**

Source | Hindustan Times | 26th November 2019

Now online — where to find rare journals and articles from British-ruled India - IdeasofIndia.org'

A newly launched database of journals & articles from 1837-1947 seeks to connect history buffs with op-eds from India's colonial past.

New Delhi: It's a peek at over 100 years of India's colonial history — a doorway to real-time commentary on a subcontinent grappling with British excesses and the ideas of identity and independence.

An Abu Dhabi-based Indian academic has teamed up with 147 researchers from 15 nations to devise a comprehensive map for dozens of forgotten journals lying in 160 libraries as far apart as the US and the UK.

History enthusiasts can log on to 'IdeasofIndia.org' to peruse through the index, which lists 255 largely unknown journals, articles and periodicals that were read and circulated in the century leading up to India's independence, between 1837 and 1947.Visitors to the website will find where a certain publication can be accessed, whether at a distant library or some other corner of the internet. It doesn't itself host any of the publications.

It took five years and $360,000 (approximately Rs 2.57 crore) to put the index together, said Rahul Sagar, the global network associate professor of political science at NYU Abu Dhabi.

"The great beauty of these periodicals lay in the fact that they devoted themselves to ideas rather than news. They served as the forum where debates could be had," Sagar told ThePrint in an email interview.

Full Info | https://theprint.in/features/now-online-where-to-find-rare-journals-and-articles-from-british-ruled-india/326767/

Handy Indian apps you can use - EXTRA CLASSES

Already worried about tutors for your kids?

Extraclass.com is a social online learning platform that curates services for students, parents, teachers, to thrive. The aim of the app is to address topics like lack of motivation and discuss what helps kids study better.

The app creates a 'gamified reward system based learning application' that links students' efforts to rewards. Promoting the concept of self-study, it helps students prepare for foundation courses for school, CBSE boards and has Olympiads for engineering, medical exams, foreign university admission, management entrance, and exams for government jobs.

Source | https://extraclass.com/

Information for this issue has been provided by Mr. Pralhad Jadhav, Senior Librarian, Khaitan & Co. Mumbai