

Your ultimate research assistant.

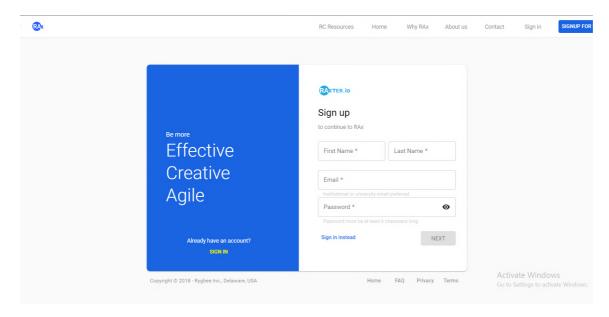
www.raxter.io



User guide:

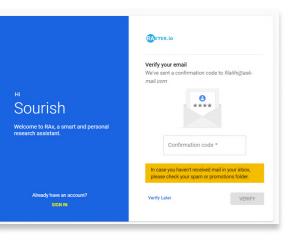
Understanding and using RAx for effective research.

Sign up and get started



To start using RAx for your research, you need to sign up on our website (https://raxter.io). We recommend you to sign up using your institutional email to get benefits of institutional features:

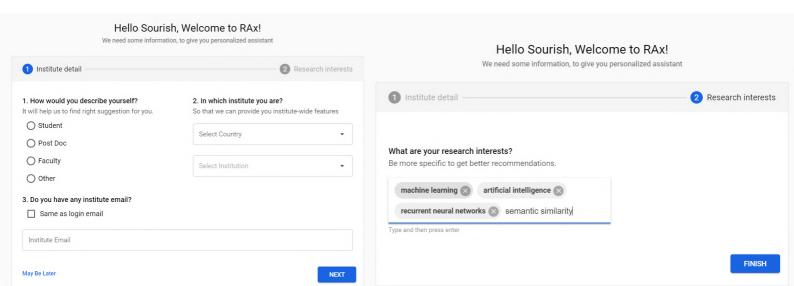
Access your institute's library anywhere from RAx Get personalized updates of the material in the library relevant to your current work RAx will be available for free for individuals if your institute subscribes to our service



Verify your email using confirmation code sent to your registered email id.

*in case you don't receive any email please check your spam or promotion folder in your inbox

Provide few details to make RAx more personalized and useful



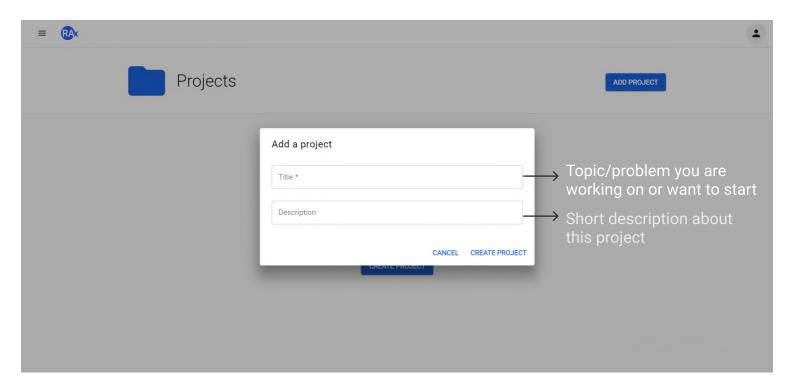
1

Create a project on RAx

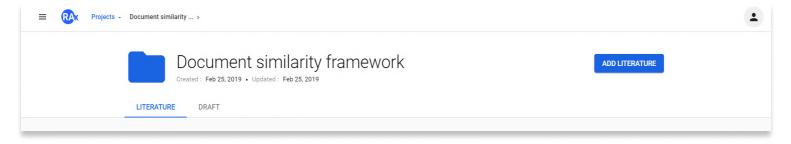
Create a project on RAx



Projects on RAx are like folders to keep your research work organized in one place.



Every project on RAx has two components (more to come in future :)



1) Literature

'Literature' is a directory of all the reading material (journal articles, conference papers, survey papers, etc.) that you upload or import into this project.

2) Drafts

'Drafts' is a directory of all the documents (observations, ideas, research questions or rough draft of your paper) that you create or import as you study or experiment during the research lifecycle.

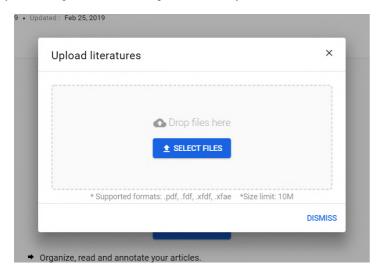
Add literature into your project

Add literature into your project

To add any literature into a project, click on "Add Literature" button.

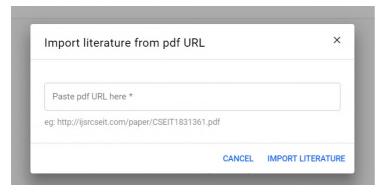


1) File upload from your computer



- Total upload size limit for free plan is 20MB
- Supported formats: .pdf, .fdf, .xfdf, .xfae

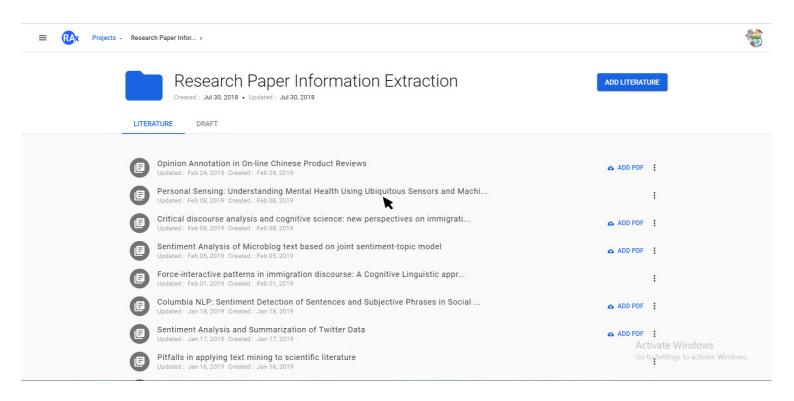
2) From URL (using PDF URL ending with .pdf)



- 3) Import from google drive (*coming soon)
- 4) Import from a reference manager (eg. Mendeley, zotero, citavi) (*coming soon)

Add literature into your project

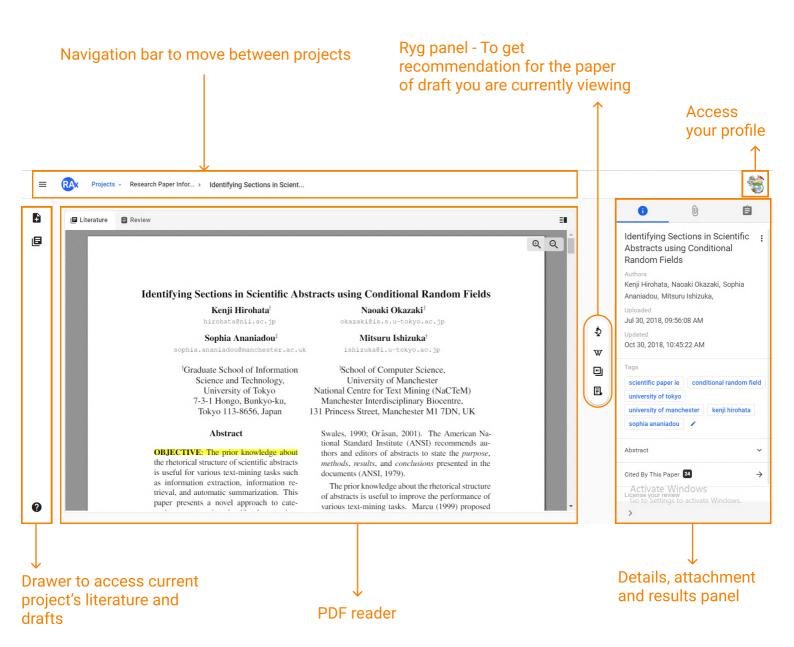
'Double click' on a paper or draft to open it.



3

Basics of RAx web-app interface

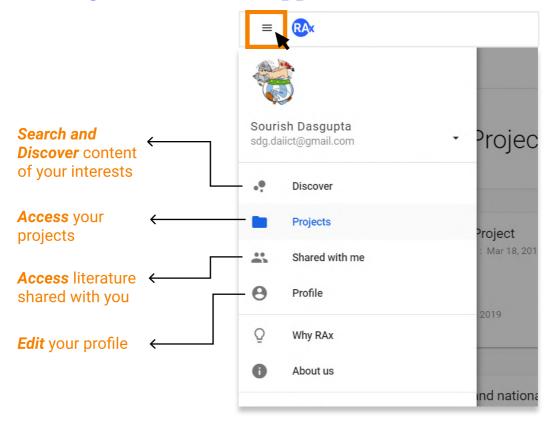
Basics of RAx web-app interface



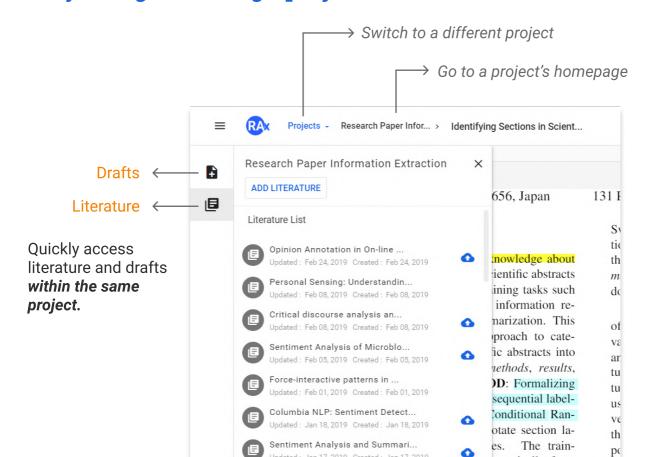
^{*}Each component is explained in detail in later sections of the manual.

Quickly get around in RAx

Navigate throughout RAx web-app



Swiftly navigate through projects

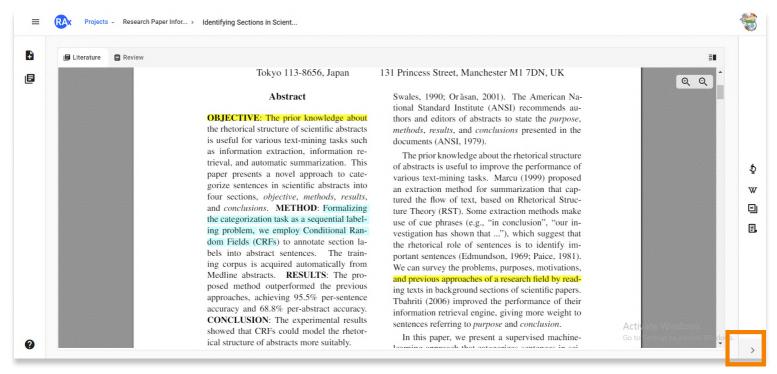


4

Read, highlight and annotate literature

Read, highlight and annotate literature

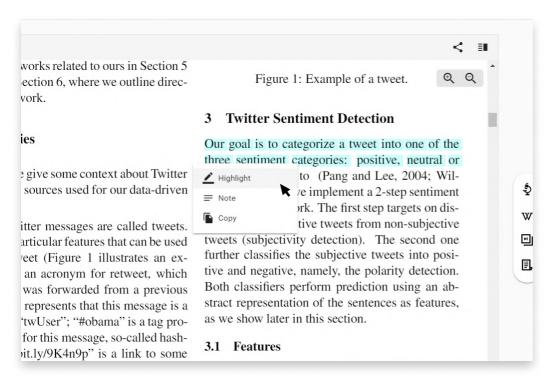
Read in expanded view

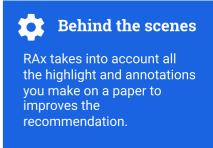


Click on collapse button to shift to expanded reading view

Highlight and annotate literature

Select the text which you want to highlight or annotate and select the respective option from the pop-up menu.

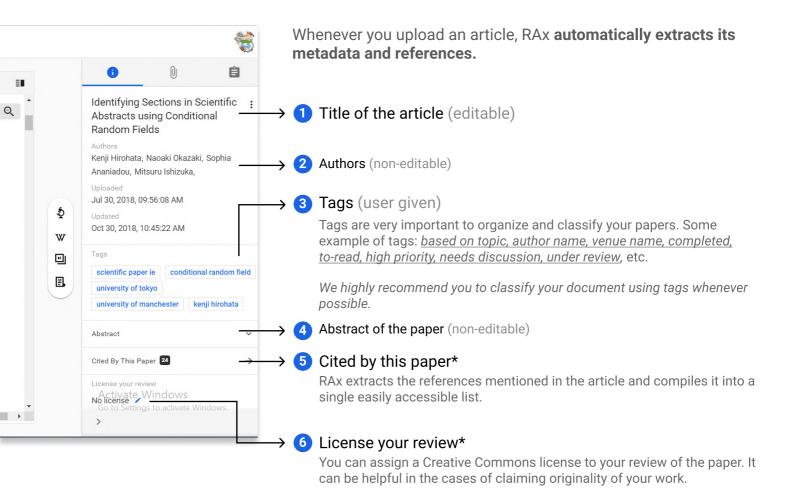




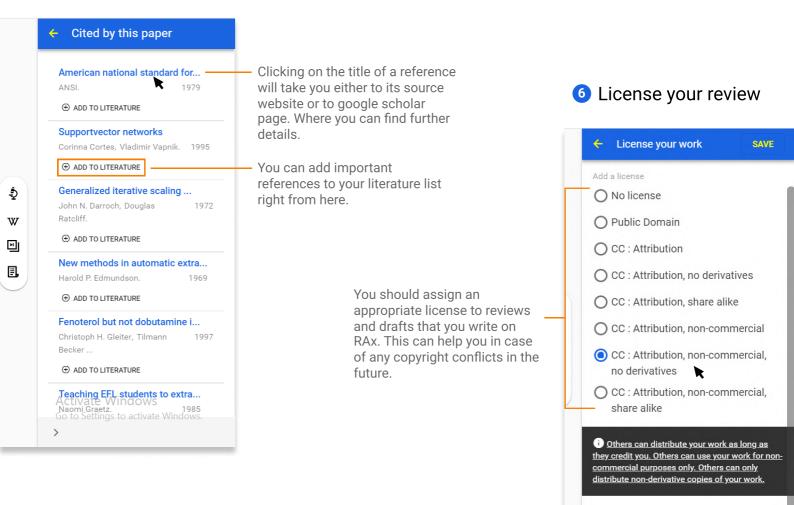
5

Review the details of the article

Review the details of the article



6 Cited by this paper



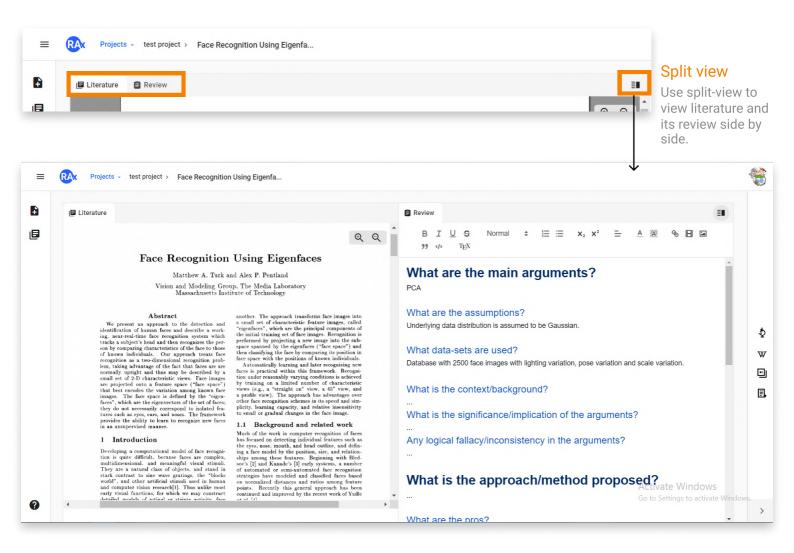
6

Review the literature effectively

Review the literature effectively

Customizable review templates

RAx provokes critical paper reading for the users by going beyond general annotations. Every paper has a question-answer format review document attached to it. The default review template comprises of general research-methodology questions that are independent of the field of research.



Note: Always make sure to apply a CC license (from details panel) to your review of the literature to avoid any copyright issues in the future.

Best practices for using Review templates

- Customize the set of questions specific to your field or problem statement.
- To make the most out of Review template, ask if your advisor can provide you with the set of questions that should be answered while reading the paper. This will push you to read & understand papers more thoroughly.

Key benefits of Review templates

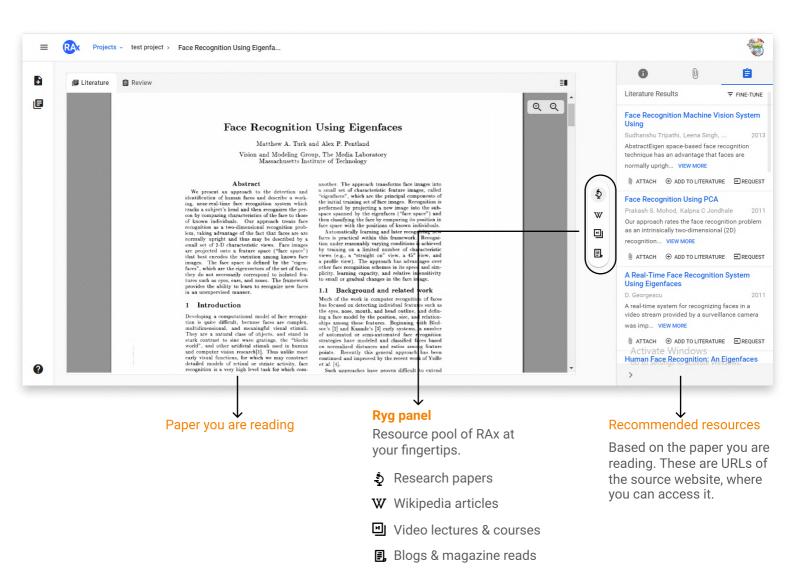
- prompts you to ask the right questions while reading a paper
- structure your critical thinking in an easy to retrieve way
- don't lose the context of your understanding or doubts again
- have a focused discussion with your supervisor or team

Get the right resources to push your research forward

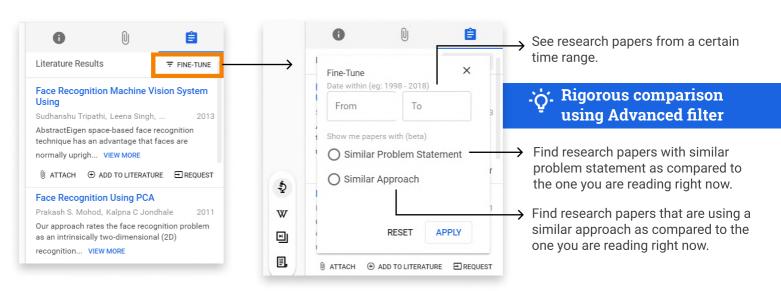
Get the right resources to push your research forward

Easily discover relevant materials to read

One of the major benefits of RAx is its **smart recommendations**. RAx scans the paper you upload, matches it with 160M+ (...and increasing) research papers indexed in our databases, and recommends you the most relevant and useful papers.



Fine-tune the recommendations

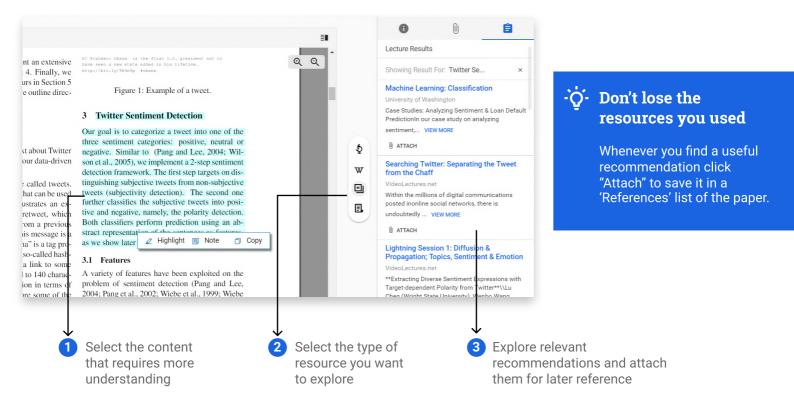


Get quick conceptual clarity of concepts in the paper

Get quick conceptual clarity of concepts in the paper

Find supplementary resources using selective rygging

RAx recommendations are not limited to research papers only. It also suggests supplemental video lectures, courses, wiki articles, blogs, and books* for conceptual clarity while reviewing a new paper.



Key Benefits of selective rygging of supplementary resources

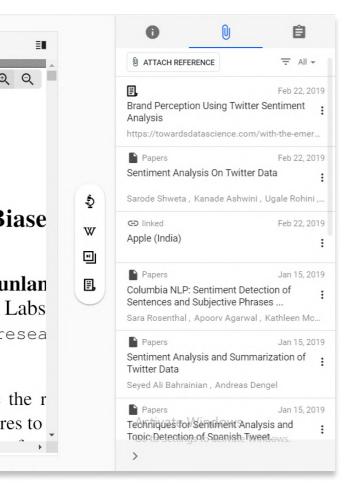
- Get quick and contextual clarification when stuck on a topic/section of the paper under review
- Helps you in keeping track of "resources" used during the paper review.
- Stay updated with recent developments related to topics mentioned in the paper.

^{*}Note: If your institute has procured RAx suite, with student demand we can also add library books and e-books along with other supplementary resources.

Attach and organize useful content & references easily

Attach and organize useful content & references easily

For each paper or draft on RAx, you can bookmark resources relevant to it in the "Attachments" section.



- Useful recommendations from RAx, that you may want to refer later
- Snaps of your blackboard discussions around the literature you are reading
- Any external web link or pdf document relevant to literature you are currently reviewing, etc.

- Adding recommendations from RAx as attachments
 - Literature Results

 FINE-TUNE

 SENTIMENT ANALYSIS FRAMEWORK
 ORGANIZATION BASED ON TWITTER
 CORPUS DATA

 Adela Beres

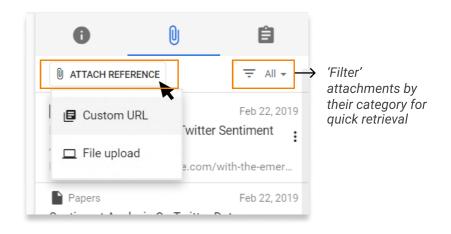
 2012

 Since its inception in 2006, Twitter has gathered millions of users. They post daily tweets about ne... VIEW MORE

 ATTACH

 ADD TO LITERATURE

 REQUEST
- 2 Adding external attachments



Difference between 'Attach' and 'Add to Literature'

For research article results, in addition to 'Attach', there is one more option: 'Add to literature'.

recently become the focus of many researchers,

ADD TO LITERATURE

because... VIEW MORE

① ATTACH

Use Add to literature when you find a particular research article that you want to review thoroughly.

Sentiment Analysis and Summarization of Twitter Data

Seyed Ali Bahrainian, Andreas Dengel 2013
Sentiment Analysis (SA) and summarization has

Seyed Ali Bahrainian, Andreas Dengel 2013
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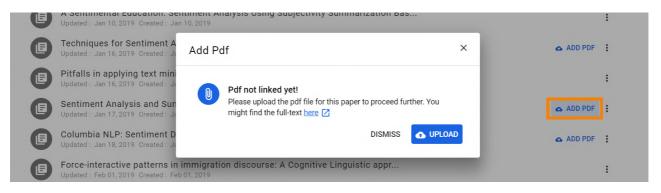
articles from your librarian.

2 Research articles that are added through **Add to Literature** option can be found in the Literature list of the respective project folder.

→ REQUEST



3 Add to Literature adds the research article as a URL and not as a PDF file. Click on 'Add pdf' option to find the full-text or upload the corresponding pdf.



Work faster with collaborators

Work faster with collaborators

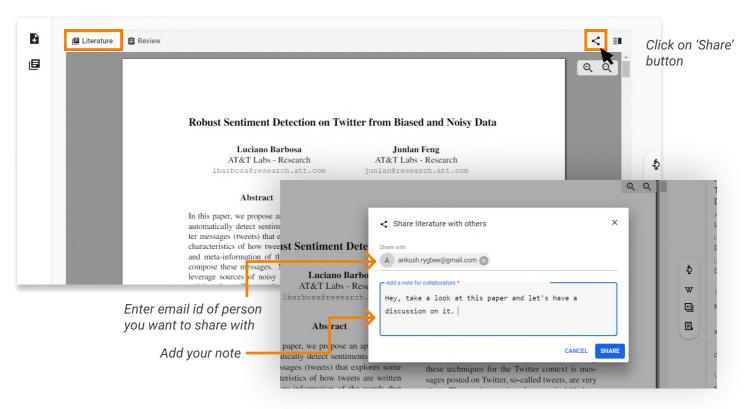
With the new **Team Feature** (Beta version) on RAx, you can share the projects with your advisor, collaborators, teammates or friends who are working (or has worked) on similar projects. Sharing your work-in-progress help to:

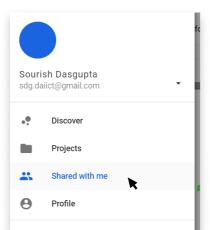
- keep everyone on the same shared perspective
- get and give timely feedbacks
- get faster understanding of concepts
- have more productive discussions
- save you from annoying email chains.

Collaborative learning through sharing literature

For a faster understanding of complex concepts within papers, you need help from your advisor, peers or an expert you know. The **Team feature** facilitates you to quickly have in-depth contextual discussions on the paper. You can even form study-circles around research papers you are reviewing thoroughly.

1 Share the literature (and your review of it)





You can access the articles that are shared with you by others access from "Shared with me" section. The collaborators can:

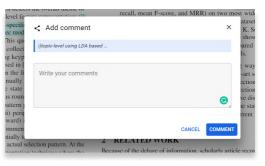
- read the shared literature on RAx
- comment on it
- see your 'Review' of the paper in read-only mode

2 Start a discussion thread on the literature

Considering the complexity of research articles, the task to decipher the text becomes challenging and time consuming for students. This is where the Team feature comes handy.

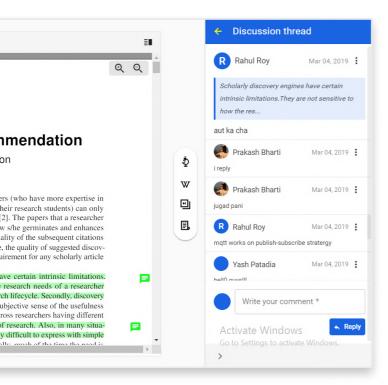
pline (i.e. domain) of the query (i.e. the paper under review or the draft for the work-in-progress). It then detects the overall theme of the paper/draft and generates a three-level feature representation: (i) topic-level using LDA based domain-specific topic models [12], (ii) word embedding level using Word2vec model trained on Wikipedia articles, and (iii) key an in-house search en 2 that are semantical niques based on sense cover as proposed in 122]. RAxBot performs a semantic content-based filtering in the first round to overcome





Enter your comment in the dialogue box

Students can share the paper with their advisor, peers or other experts to:



- understand concepts within the paper
- learn from senior's experience with a particular topic
- can get more efficient alternatives to method/experimentation/analysis through
- suggestions from advisor or experts.
- find other useful reading that collaborators can mention in comment
- develop their hypothesis for future work
 ...and refine and revise their research.

Authors can share their paper with other professors and experts to receive feedback, discover related content and even find a future collaborator.

№ Benefits of sharing your review of the literature

We recommend you to share the review of key literature with your advisor or experts for a **faster and thorough review process**.

By sharing the review and corresponding literature, you can have focused and meaningful discussions with your advisor. Instead of wasting a lot of time in recollecting what was the last discussion about and bringing the advisor on the same page as you are.

Also, the advisor can proactively guide you before you wander into a direction only to change it after weeks of work.

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Document your ideas, thoughts and work-in-progress

Document your ideas, thoughts and work-in-progress

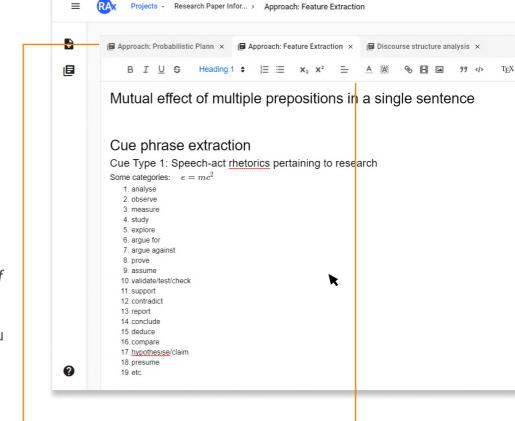
Research is never only about reading, learning and collating existing work. Creating your own insights, new ideas, observations, questions, and perspectives is an equally important part of the research process.

Knowledge acquisition and knowledge creation are tightly coupled process, and RAx is designed to facilitate that. That is why within every project along with a Literature library you have a directory of '*Drafts*'.

Drafts are made to facilitate you quickly capture

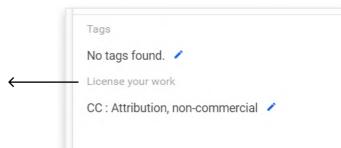
- ideas that you get during reviewing the literature
- observations
- initial thoughts about the experimental setup
- derivative research question
- hypothesis
- blogs related to your work
- a rough outline of the final draft of the paper you will be writing

...and pretty much anything else you would want to document.



With RAx you can see and quickly switch between multiple drafts in a single tab. No need to switch to another app for quick documentation and no more clutter of multiple tabs. The rich text editor allows you to write detailed and complex documents with ease. You can add lists, images, web links, video links, code snippets, and Latex formulas.

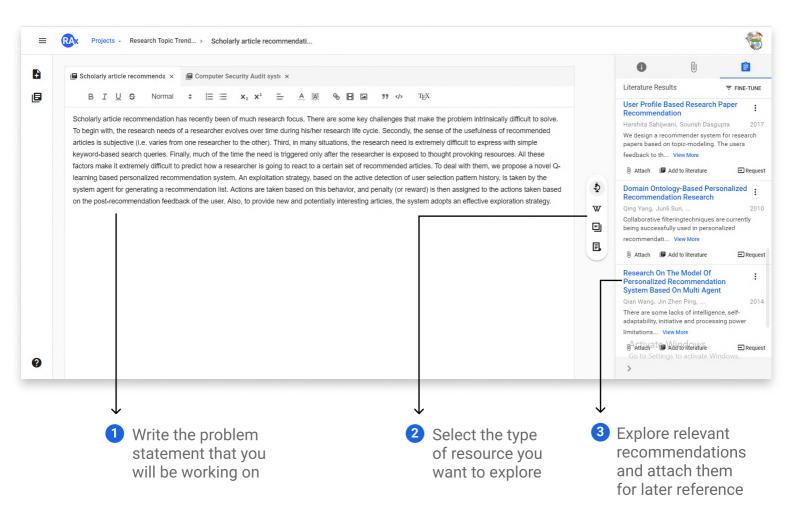
Note: Always make sure to apply a CC license (from details panel) to your drafts to avoid any copyright issues in the future.



Document your ideas, thoughts and work-in-progress

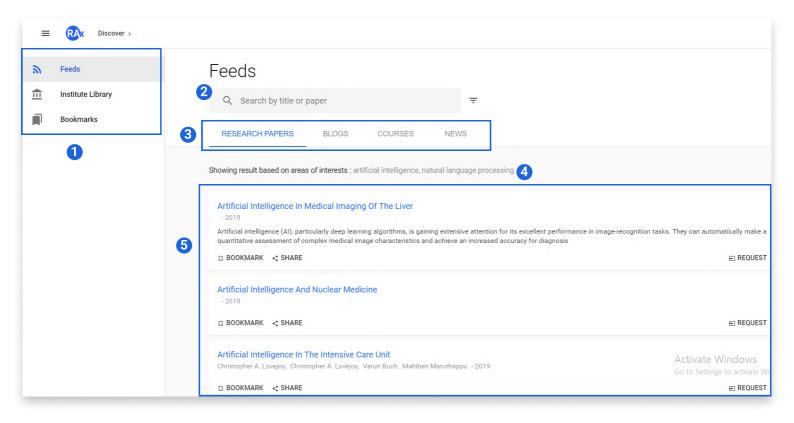
Do a thorough literature search for your problem statements

Apart from quick and easy documentation, Drafts can be used to do a thorough literature search for your chosen problem statement. Create a draft and jot down your problem statement or abstract or rough idea that you want to pursue.



Stay up to date with the world around your research interests and project work. RAx constantly scan the internet to bring you the most current and relevant content in **Discover** page. You can access Discover page from top left menu icon.

You can search and discover not only **research papers** but also **latest blog articles**, **online courses**, and **news**. If you belong to the institute that has subscribed to our service, you can **easily access all the content of your institute's library** from 'Discover' page.



1 Feeds - A collection of online resources that are hand-picked and indexed by our team. Search from some of the finest sources across the web that are vital for staying updated in today's academia.

Institute Library* - If you belong to the institute that has subscribed to our service, you can easily access all the content of your institute's library from here.

Bookmarks - Access all the bookmarked resources from Feeds and Library.

- 2 Search and filter content Enter your query into the search box and date wise filter the results.
- 3 Resource categories Select the type of resource you want to search.
- **Search query -** By default the results are shown on the basis of *your areas of interests*. When you enter a search query, RAx shows you results relevant to your query.
- **Results -** Click on the title to go to the source website. Bookmarks to read it later. For subscribed Institutes, an individual can 'Request' the full-text of important research papers from the librarian directly from RAx, with just one-click.

Go beyond simple keyword search

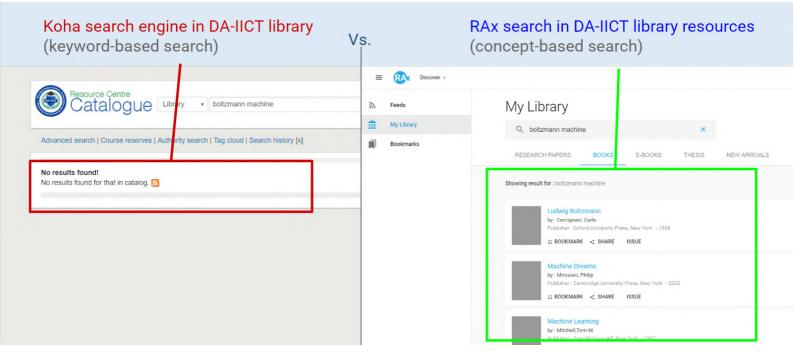
Whenever you enter a search query in Discover page, RAx enriches the query by identifying relevant concepts and resources that may not have the exact keywords in it but is related to what you are searching for. This significantly increases the chances of discovering useful content that otherwise would be hidden.

Following example shows how search in RAx is different than traditional discovery engines used by libraries.

Search query: Boltzmann machine (it is a type of stochastic recurrent neural network widely used in machine learning and artificial intelligence applications).

Behind the scenes

RAx uses semantic layering over keyword search to enrich the discovery of content. It identifies topics peripheral to the topic/concept being searched and shows you all the relevant resources.

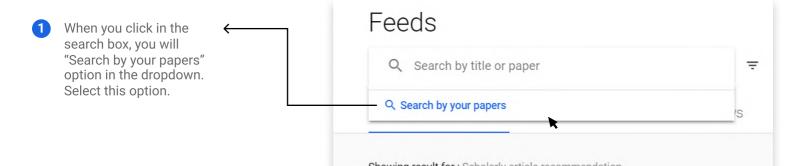


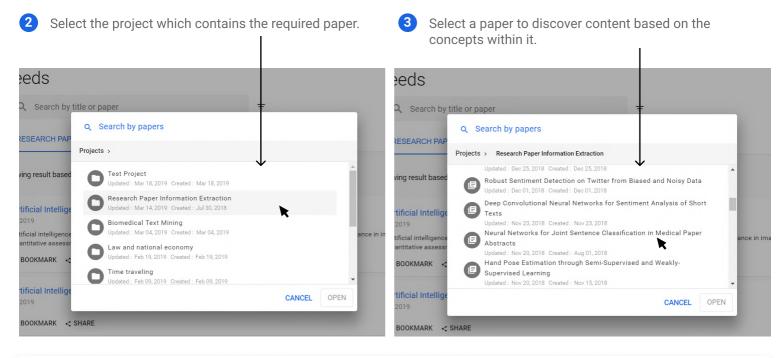
A normal discovery engine returned no result since it could not find any resource with the exact search keywords.

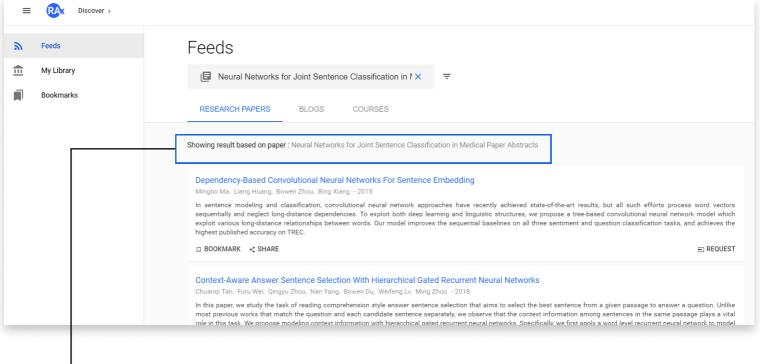
RAx identifies concepts relevant to Boltzmann machine and shows books available in the library, which otherwise could not have been found by students.

Faster content discovery in the early stage of research

Most of the traditional discovery engines use keyword match and advanced binary filters. These tools are not very useful in the early stage of research when we don't know what exactly to search for. RAx solves this issue using "Search by your papers" functionality.







Benefits of using "Search by papers"

- In early stages of research or whenever you don't have exact keywords to search for, the papers that you have contains keywords or topics or concepts based on which you can discover further leads. Thus "Search by papers" facilitates **faster discovery of content.**
- The results you find via "Search by papers" can trigger new direction of thinking or can open up a perspective that you otherwise would not have thought about. This is important since many of the great research breakthroughs were triggered by unanticipated cue.
- Also, "Search by papers" is helpful in **staying up-to-date** with the latest work and activity around the topics that you are reading in the important papers.

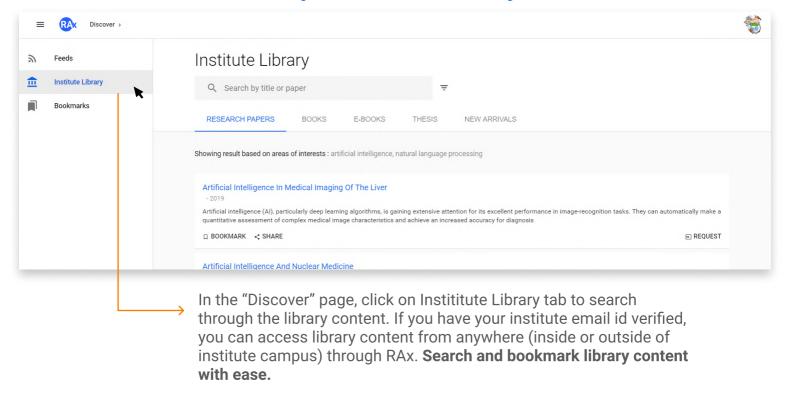
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Benefits of Institutional plan

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If the institute to which you belong has integrated RAx with the institute library, then you have access to some additional benefits to make the best use of your institute library.

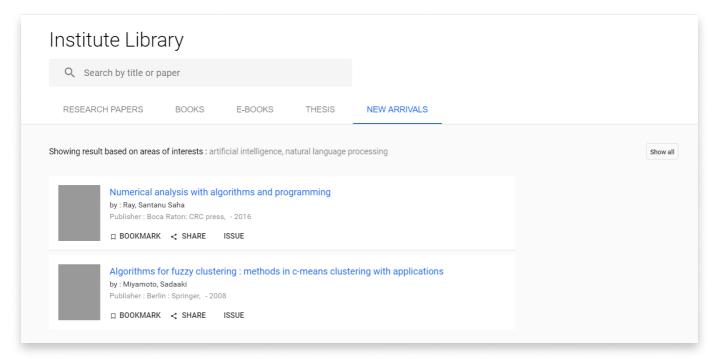
Clean interface for library search - from anywhere



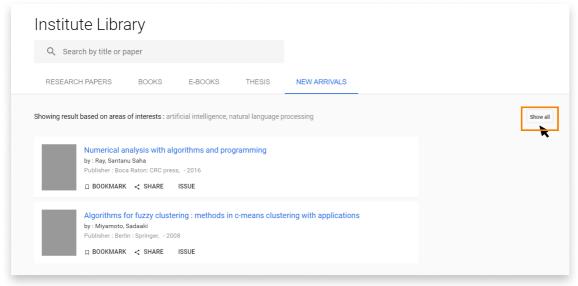
Get personalized updates from library

Do you just ignore the new-arrivals mails from library? Or wish that library mailers were more relevant for you. With your institutes library integrated in RAx, you will only get update about the content that matters to you.

RAx scans through the library and recommends you most relevant content based on your project and areas of interest.



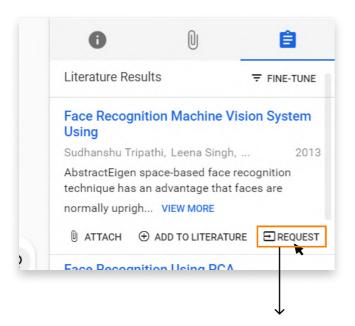
Benefits of Institutional plan

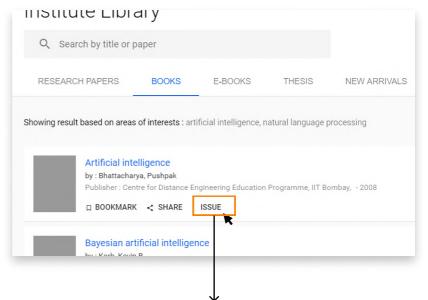


Click on 'Show all' to see all the new arrivals for a particular week

One-click request for content

With RAx, requesting paid-content and issuing library material is just a work of one click. No more copying meta-data of the material you want and writing a mail to librarian.





1 If you get a useful recommendation but the paper is not accessible for free, click on the 'Request' buttton the result card.

This will send a request mail to your institute librarian on behalf of you via RAx. You can access the pdf sent by the librarian in the replied email.

Click on 'Issue' button to reserve the book for yourself.