



BIP! Scholar: Going Beyond Researcher Profiles

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2/11/2023

be ready!
menti.com will be used in two slides
😊

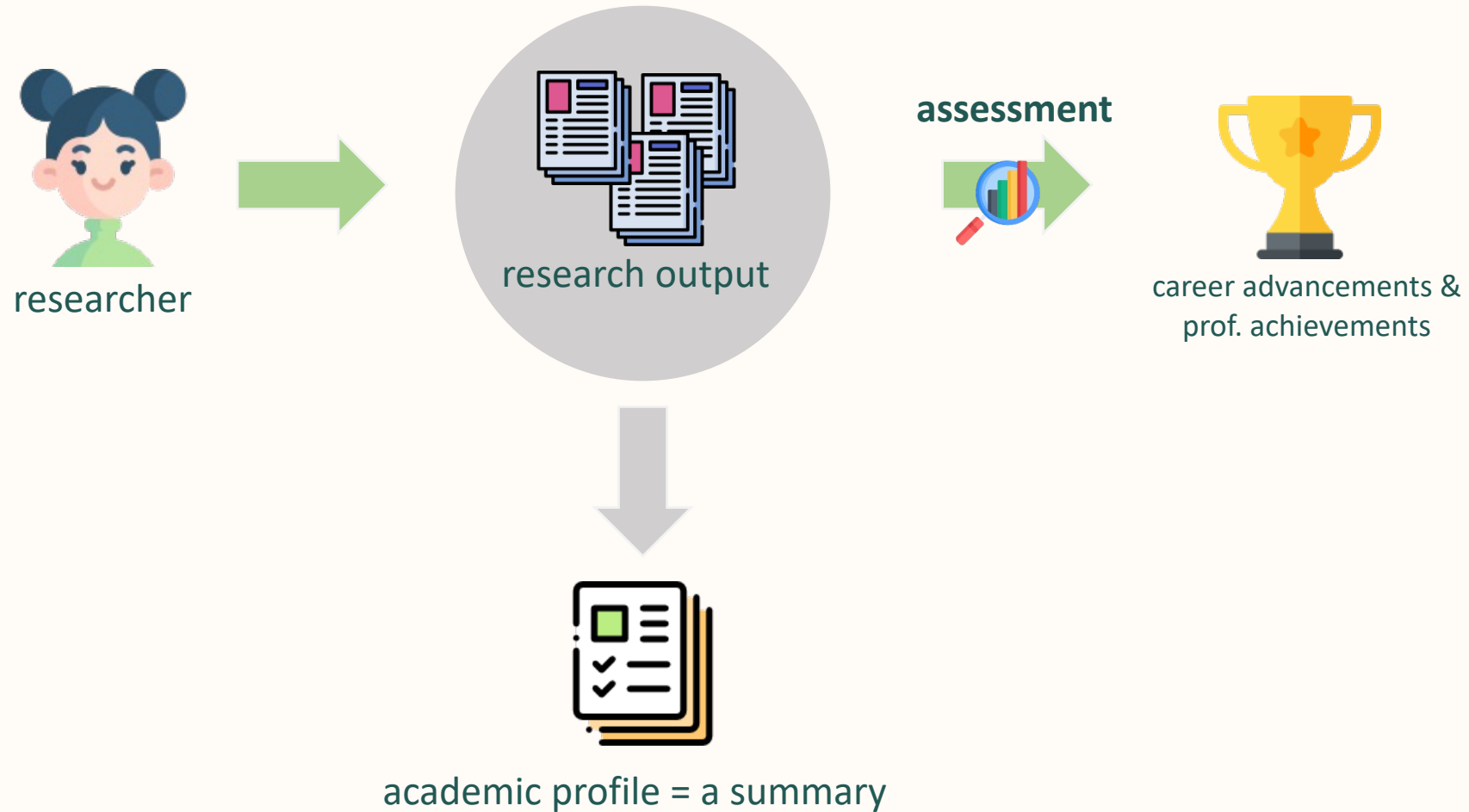


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Join

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Why do we need academic profiles?



The problem with scientific output growth



the number of researchers is growing

UNESCO: ^20% between 2007-2014^[1]



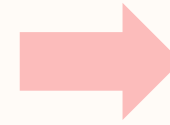
publish or perish culture

pressure on researchers to publish more



predatory publishers

offering quick & easy publication

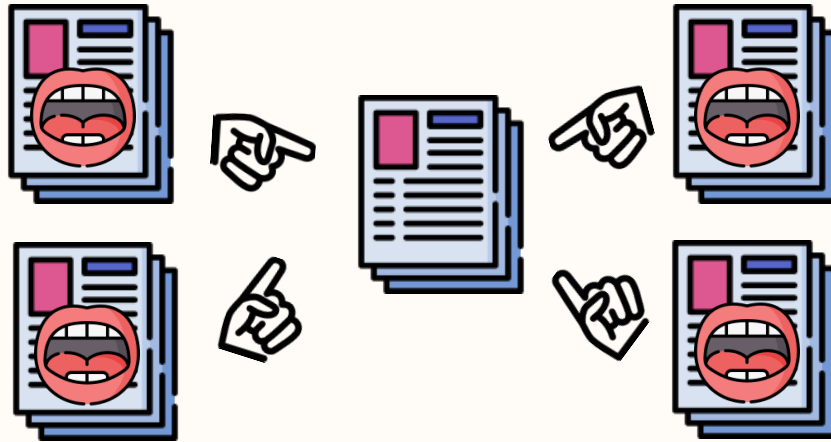


exponential growth of scientific output

hindering tasks related to **research assessment** and **scientific knowledge discovery**

[1] UNESCO Science Report: towards 2030. UNESCO Publishing, 2015

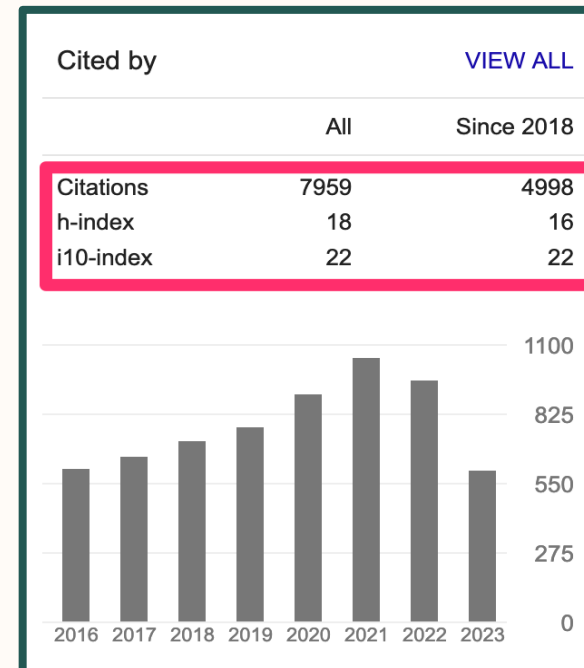
Using impact indicators to alleviate the issue



estimate the **scientific impact** of an article by analyzing how many other articles are "talking" about it

the more they talk, the most the impact

Google Scholar search results for "artificial intelligence". The top result is a PDF titled "Artificial intelligence: a modern approach" by Russell and Norvig (2002), with a citation count of 38141. The second result is a book "An artificial intelligence approach" by Mitchell, Michalski, and Carbonell (2013), with a citation count of 2573. The third result is an HTML page "Artificial intelligence" by Dick (2019), with a citation count of 121.



citation count: a simple, popular scientific impact indicator

used to order publications to help with reading prioritization

citation-count-based author-level indicators used as a "shortcut" for researcher assessment

A common structure for an academic profile



Yoyota Vuvuli

contact details
affiliations

(citation-based) indicators

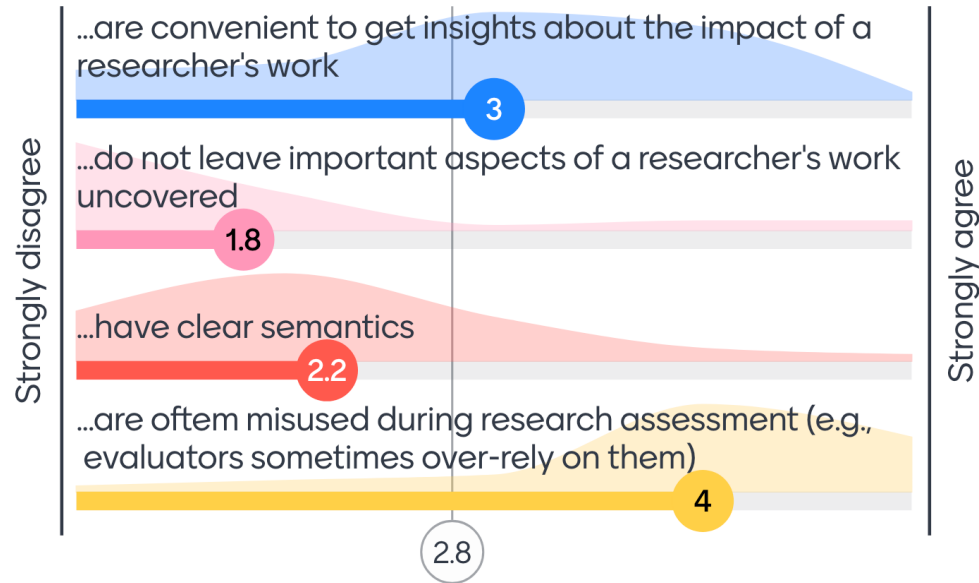


Publications



menti.com: audience feedback

Citation-count-based indicators...



32

Some problems...



Yoyota Vuvuli

contact details
affiliations

(citation-based) indicators



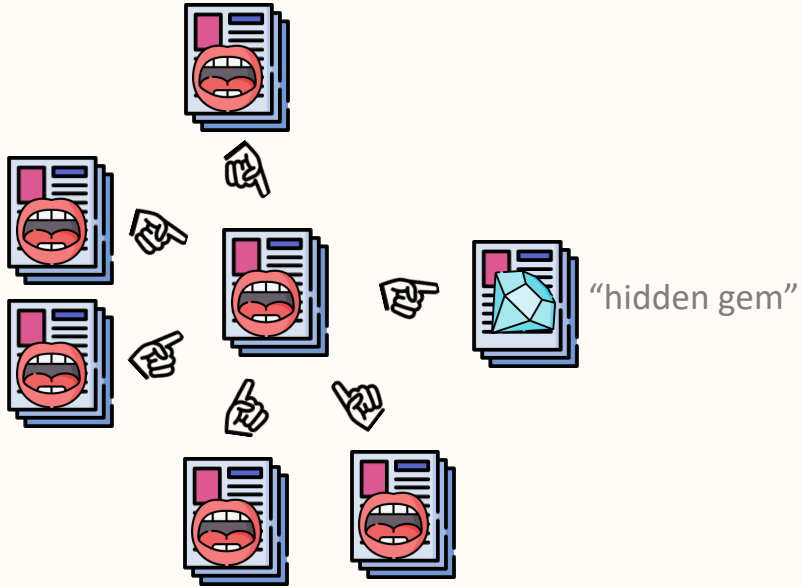
Publications





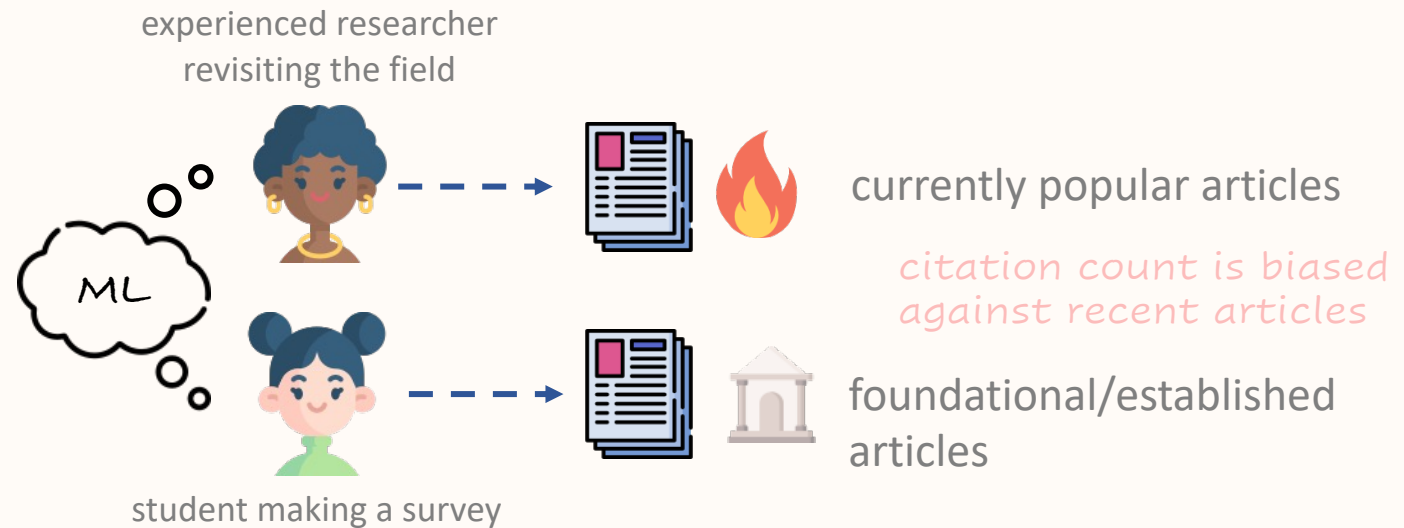
citation count has known issues...

...that can affect our ability to discover valuable research



impact has multiple aspects...

...and different of them can be important in different use cases






indicators can be gamed...

...using indicators capturing a wide range of impact aspects can help (make attacks more difficult)

GOODHART'S LAW
WHEN A MEASURE BECOMES A TARGET, IT CEASES TO BE A GOOD MEASURE

IF YOU MEASURE PEOPLE ON...	NUMBER OF NAILS MADE	WEIGHT OF NAILS MADE
THEN YOU MIGHT GET	1000'S OF TINY NAILS	A FEW GIANT, HEAVY NAILS

<https://sketchplanations.com/goodharts-law> sketchplanations

Goodhart's/Campell's law & "Cobra effect" 



indicator semantics & provenance are important...

...to protect from improper use, misconceptions & indicators cherry-picking

THEY SAY YOU CAN'T IMPROVE IT IF YOU DON'T MEASURE IT!

SO WE TRACK EVERYTHING!

WHAT IS THAT METRIC ?

I HAVE NO IDEA.

workchronicles.com

Work Chronicles is a webcomic about work. Follow for more. Find us on IG, Twitter, LinkedIn, Reddit. Work Chronicles workchronicles.com

<https://workchronicles.com/comic-measure-it-improve-it/>

OUR NEW DASHBOARD HAS ALL OF THE DIFFERENT KPI'S WE CAN TRACK NOW.

WHAT'S THAT KPI TRENDING TO ZERO?

IT MEASURES HOW WELL WE UNDERSTAND THEM ALL.

TOM FISH BURNE

<https://marketoonist.com/2019/11/kpi-overload.html>

marketoonist.com



impact is not everything / publications is not everything...

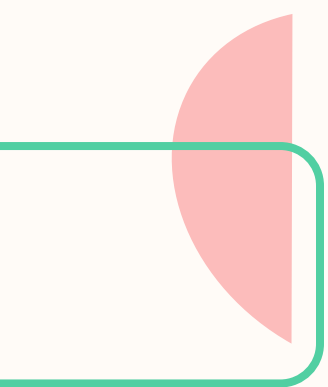
...impact is not 100% correlated to scientific merit or others aspects of "academic performance" that may be difficult to quantify

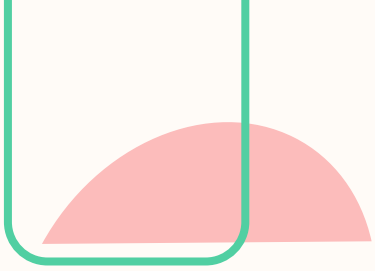
...there are a lot of important research activities (e.g., software development, dataset production, peer review, teaching) that are not properly acknowledged



indicators should only be used to support the respective tasks...

...over-relying on them creates problems





**generic profiles are not easy to use
for all use cases**



how it started...

Journals & Magazines > IEEE Transactions on Knowledg... > Volume: 33 Issue: 4

Impact-Based Ranking of Scientific Publications: A Survey and Experimental Evaluation

Publisher: IEEE

Cite This

PDF

Ilias Kanellos ; Thanasis Vergoulis ; Dimitris Sacharidis ; Theodore Dalamagas ; Yannis Vassiliou All Authors

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Cites in
Papers

564

Full
Text Views



“traditional” impact (citation count)



influence (PageRank)



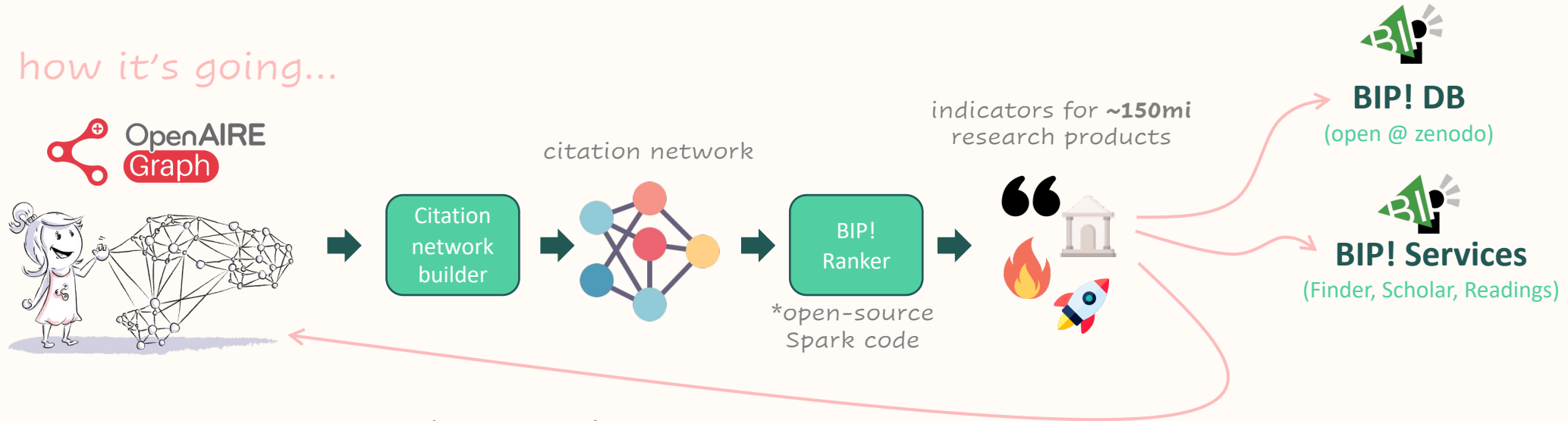
popularity (AttRank)



impulse (3y citation count)

Our approach for indicators

how it's going...



*worth mentioning:

- we also **classify** all research products based on their ranking (e.g., in top 1%)
- we **do not double-count** citations from different versions of the same article
- we offer **detailed explanations** for proper uses & misuses and documentation for **transparency on calculations**



Our approach

for considering other types of contributions


Currently the system supports **publications & datasets**

Soon to add:

- Software
- Reviews
- Projects
- Teaching

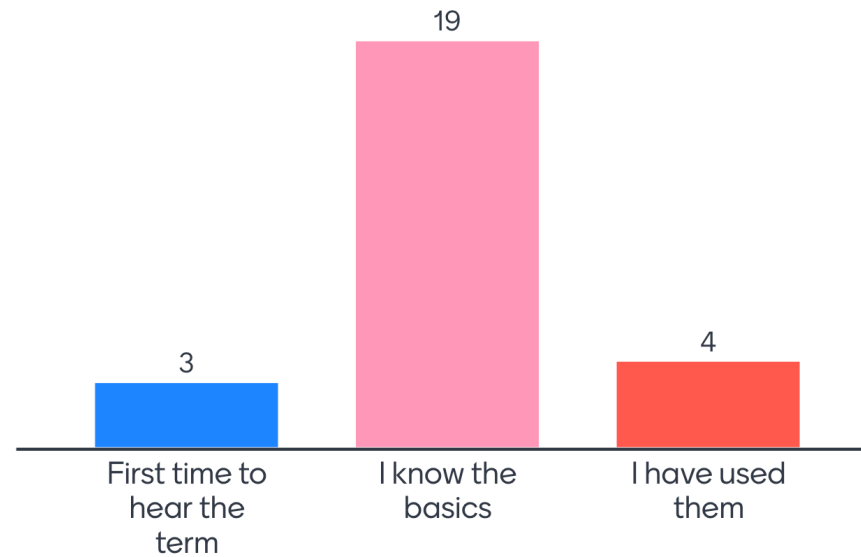
The system identifies the **topics** of the works and supports the declaration of the **contribution roles** in each of them (based on CRediT).

The system supports **profile “views”** to better explore the profiles from different perspectives (e.g., according to topics, roles)



menti.com: audience feedback

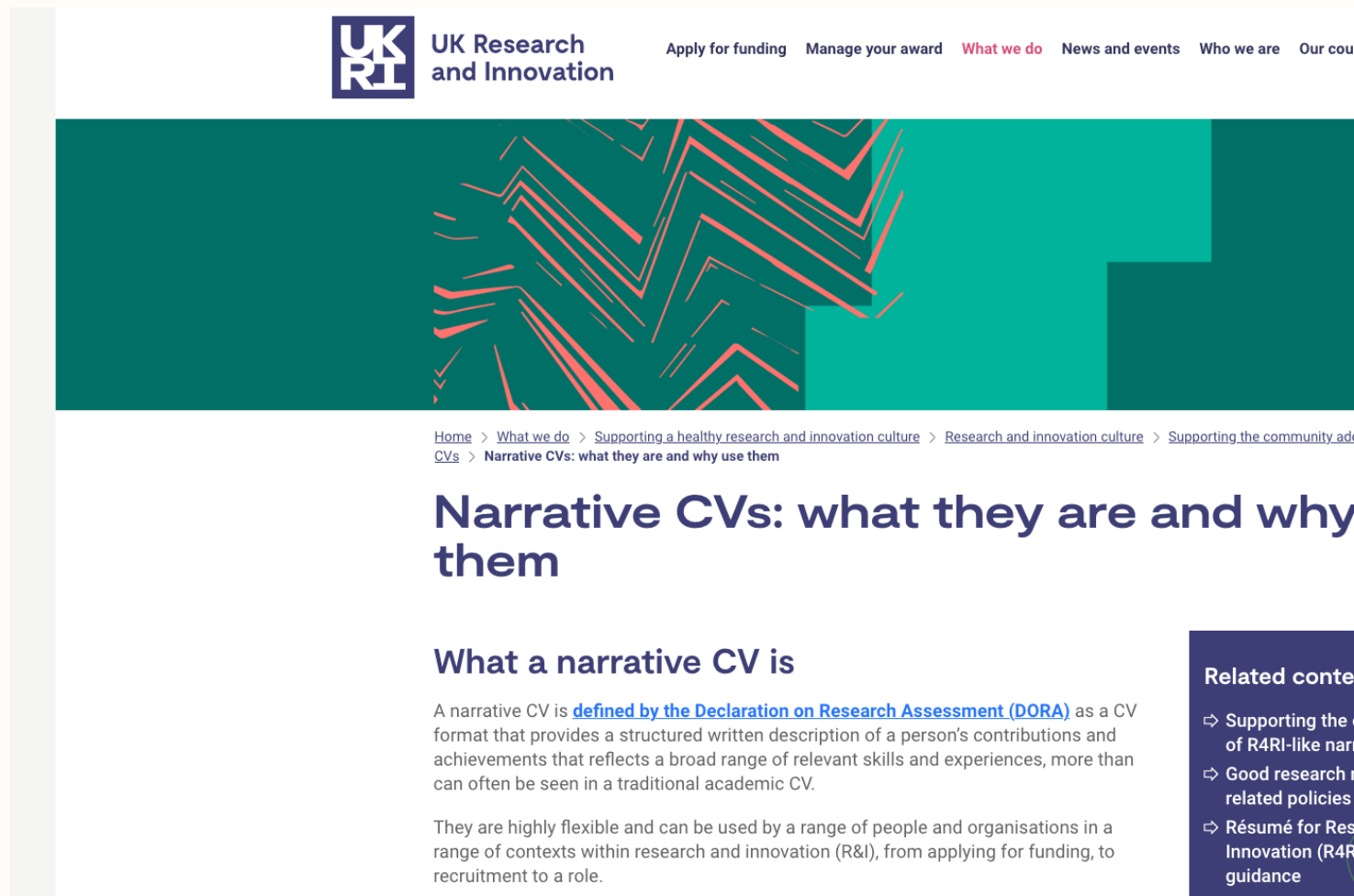
Regarding narrative CVs...



Our approach

for putting research into context

The system supports the creation of narratives that describe lines of works and explain their impact, skills used, etc.

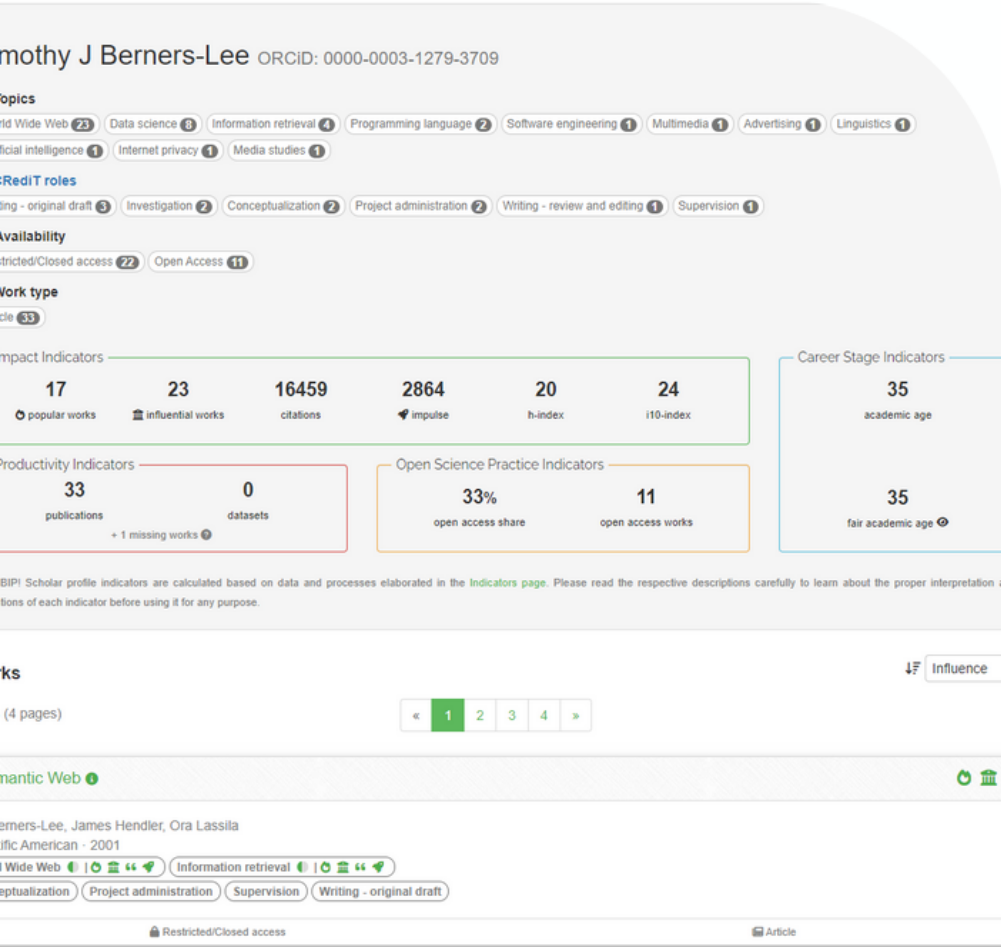


The screenshot shows the UK Research and Innovation website. The header includes the UKRI logo and navigation links: 'Apply for funding', 'Manage your award', 'What we do', 'News and events', 'Who we are', and 'Our cou'. The main content area features a large teal and orange abstract graphic. Below the graphic is a breadcrumb trail: 'Home > What we do > Supporting a healthy research and innovation culture > Research and innovation culture > Supporting the community adoption of R4RI-like narrative CVs > Narrative CVs: what they are and why use them'. The main heading is 'Narrative CVs: what they are and why use them'. Below this is a sub-heading 'What a narrative CV is' followed by a paragraph: 'A narrative CV is defined by the Declaration on Research Assessment (DORA) as a CV format that provides a structured written description of a person's contributions and achievements that reflects a broad range of relevant skills and experiences, more than can often be seen in a traditional academic CV.' Another paragraph follows: 'They are highly flexible and can be used by a range of people and organisations in a range of contexts within research and innovation (R&I), from applying for funding, to recruitment to a role.' On the right side, there is a 'Related content' sidebar with three items: 'Supporting the adoption of R4RI-like narrative CVs', 'Good research practice and related policies', and 'Résumé for Research and Innovation (R4RI) guidance'.

Screenshot from: <https://www.ukri.org/what-we-do/supporting-healthy-research-and-innovation-culture/research-and-innovation-culture/supporting-the-community-adoption-of-r4ri-like-narrative-cvs/narrative-cvs-what-they-are-and-why-use-them/>

BIP! Scholar profiles

Emphasize what matters in your research work and put it into context.



Enriched ORCID-based profiles

BIP! Scholar offers researchers the option to create ORCID-based academic profiles enriched with valuable additional information (e.g., CRediT roles, indicators, narratives).

Put your work into context with narratives

BIP! Scholar helps researchers in creating narratives that describe interesting lines of work providing valuable information about the respective impact and the related activities and skills.

Explore your work from different perspectives

BIP! Scholar can help the exploration of different perspectives of a researcher's career: tailored views of each profile can be dynamically produced according to particular topics, roles, work types, and so on.

Example profile: <https://bip.imsi.athenarc.gr/scholar/profile/0000-0003-0555-4128>



Important next steps...

Improvements in **data impact indicators**

Supporting **assessment protocols** from well-established frameworks
(e.g., GraspOS' OSAF)

Functionalities to **facilitate the creation & analysis of narrative CVs**
(e.g., support of widely-known templates)

Support multiple ways to **download & share profile views**



Create your own profile!



create your own profile:



Thank you!

email: vergoulis@athenarc.gr

twitter/X: **@vergoulis**

mastodon: **@vergoulis@scicomm.xyz**