

Utilizing Ricgraph to gain insights into research collaborations across institutions, at every organizational level

Presentation at Research Intelligence Network Netherlands
University of Amsterdam
December 1, 2025

Rik D.T. Janssen
Utrecht University
r.d.t.janssen@uu.nl
 0000-0001-9510-0802
www.ricgraph.eu

Contents

- Ricgraph introduction
- Research collaborations
- Developments
- Questions



What is Ricgraph - Research in context graph?

Ricgraph enables the exploration of

- researchers, teams, their results, collaborations, skills, ...
- and their relations
- using a graph (network)

These originate from

- various systems and multiple organizations

You can

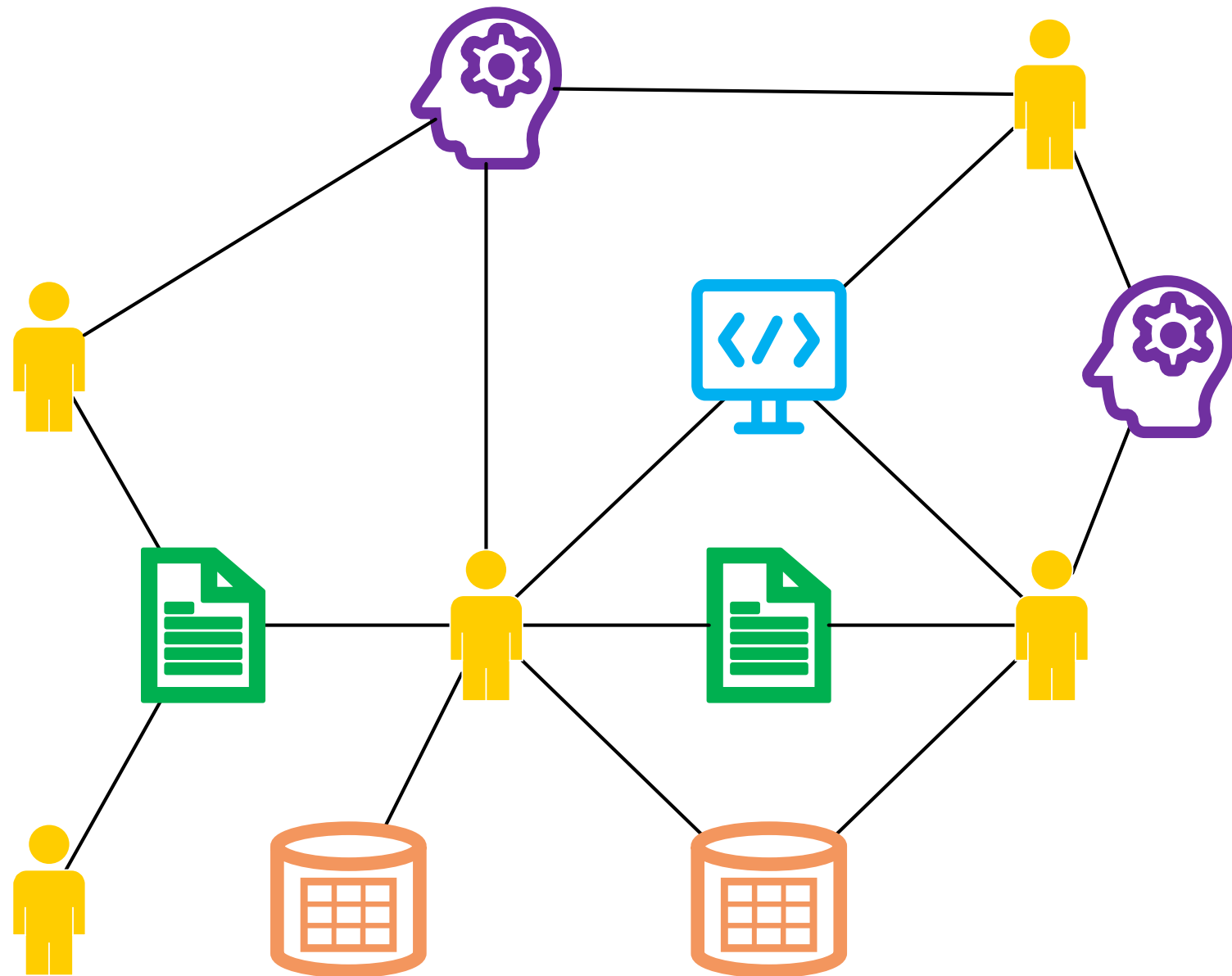
- explore research information
- infer (new) relations



What if...

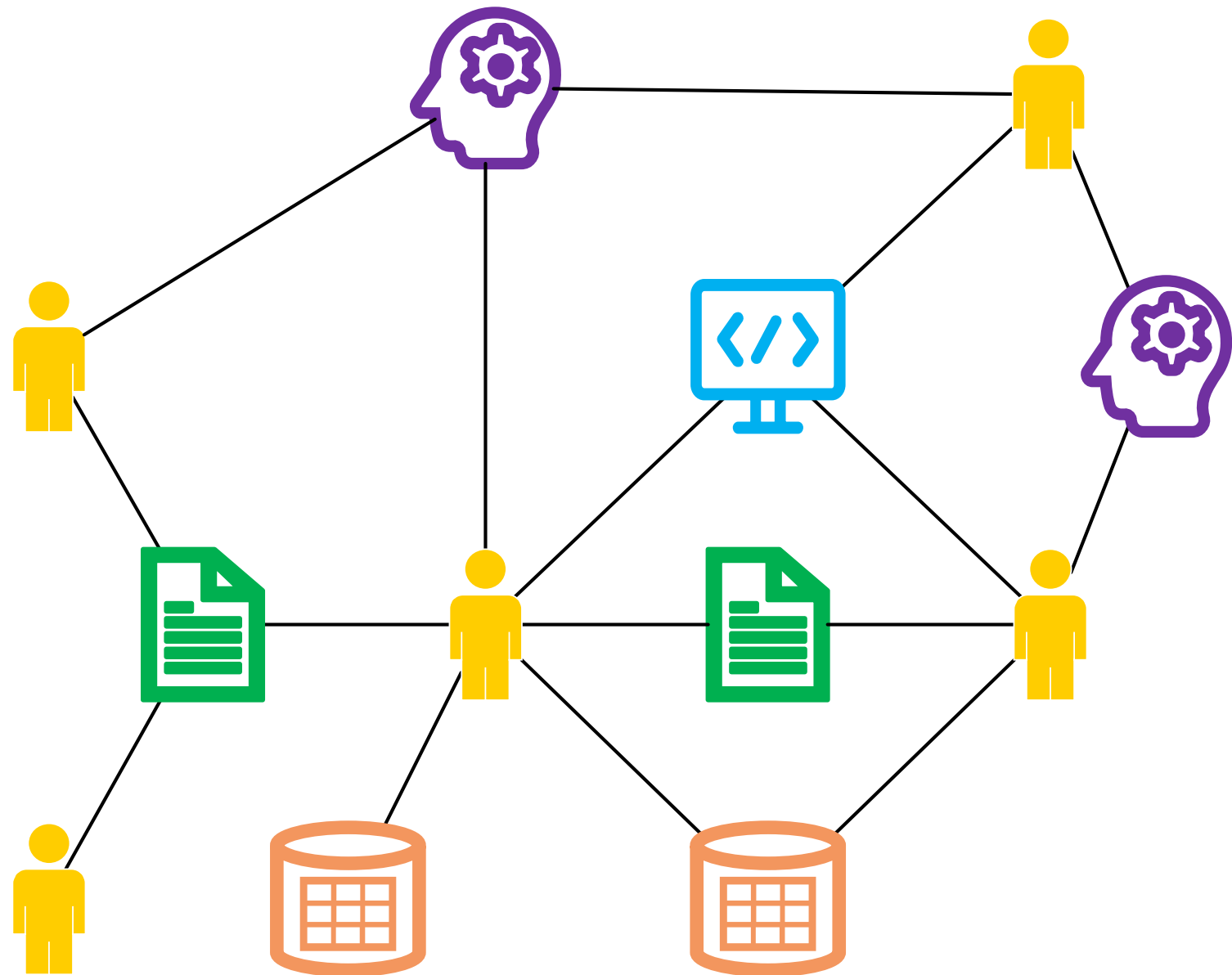
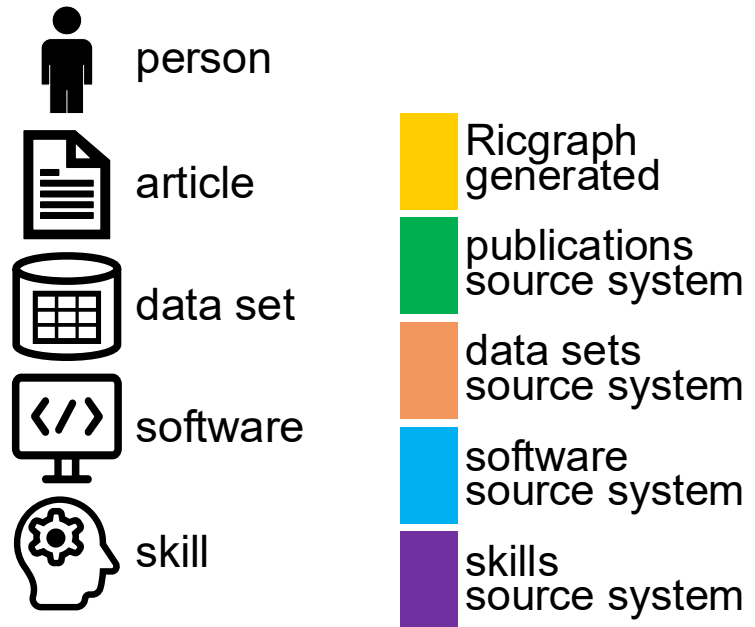
we look at research information as a network (graph)?

- We have relations between items
- Related items are neighbors
- We can “walk” from one item to another
- No duplicates



What is Ricgraph?

- many types of items in a single graph
- multiple source systems
- facilitates reasoning: infers new relations between items

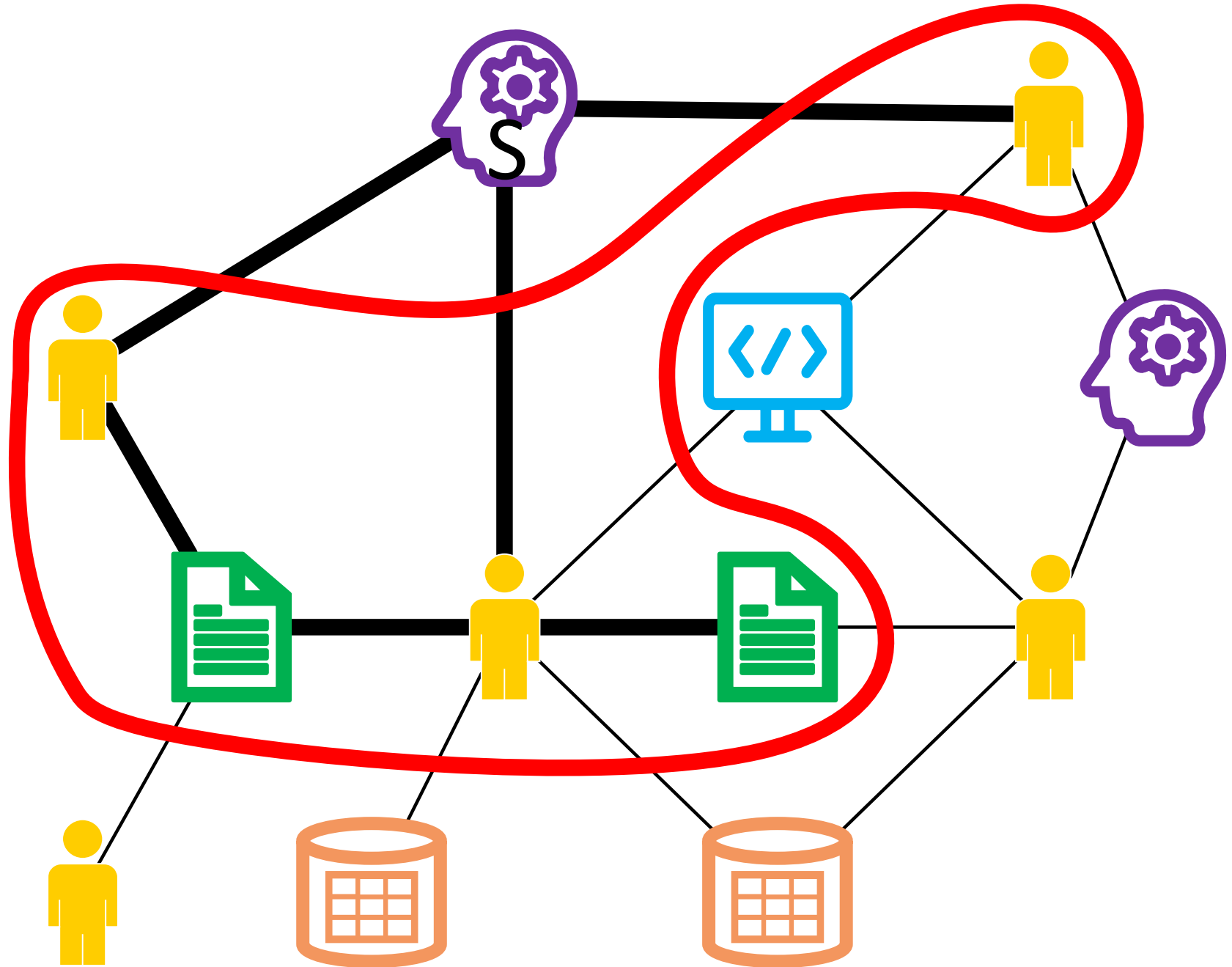


What can Ricgraph do?

Use case

As a journalist, I want to find experts with skill S and their publications, so that I can interview them for a newspaper article

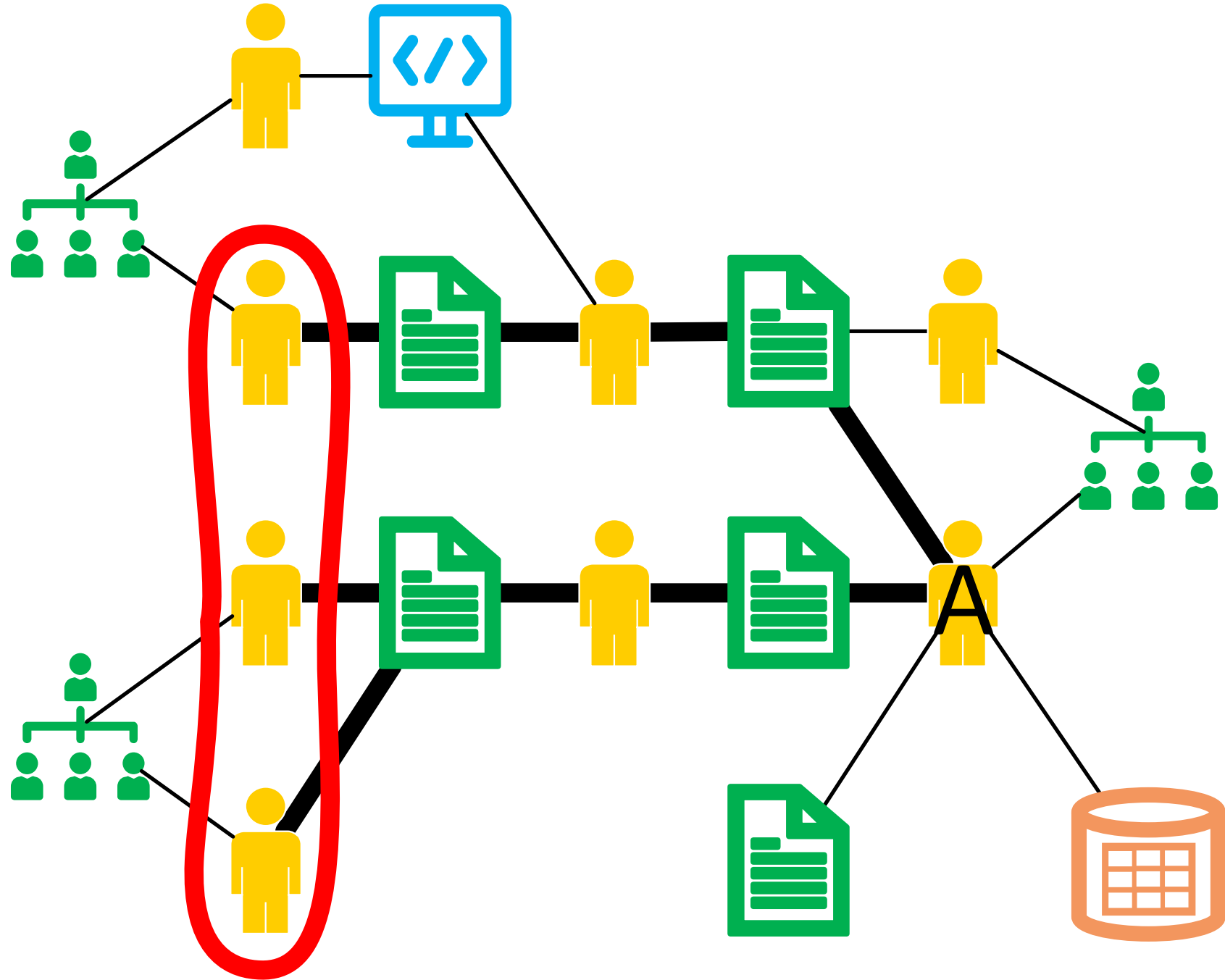
Example skill: climate change, stem cells



What can Ricgraph do?

Use case

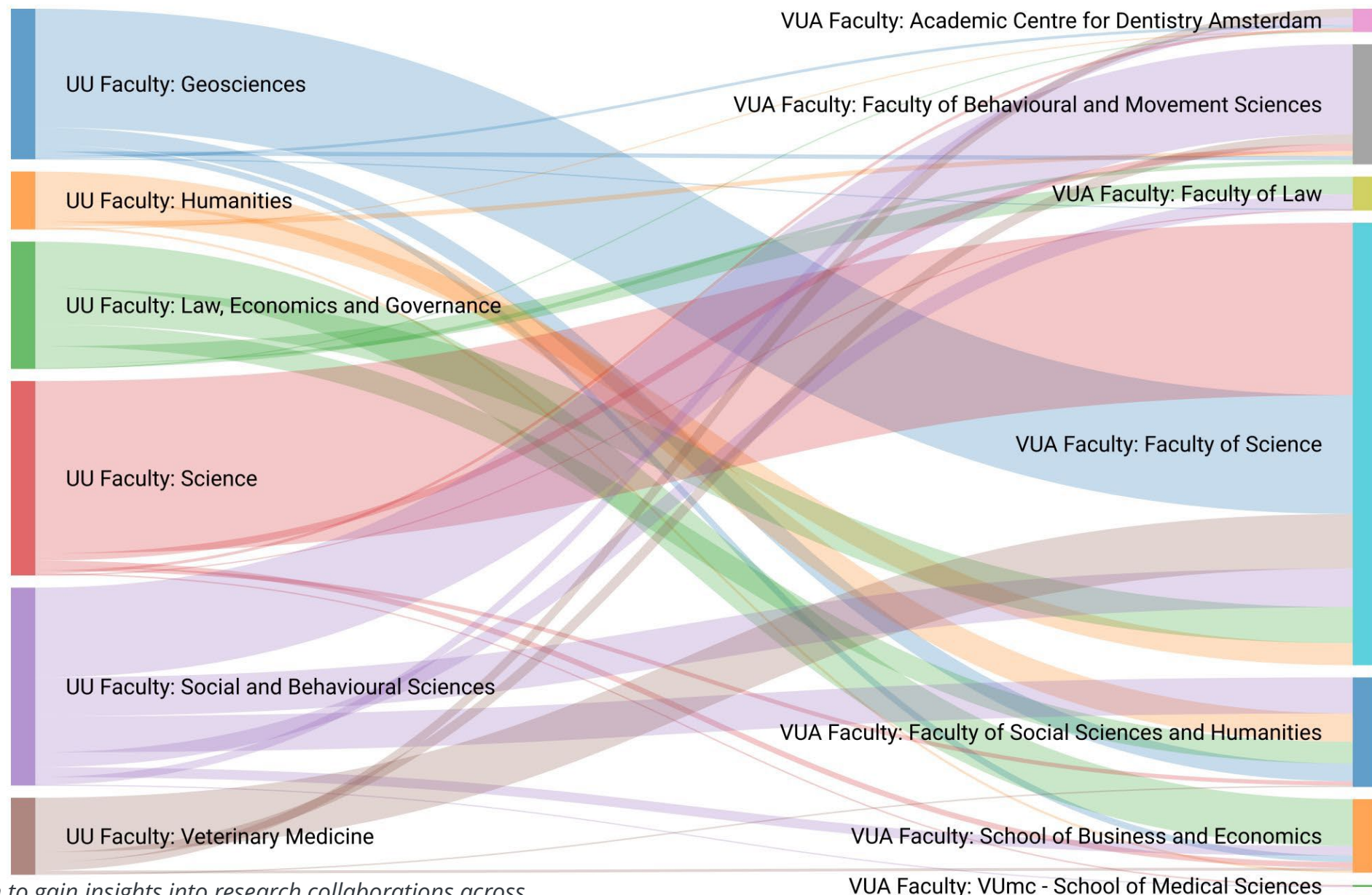
As researcher A, I want to find co-authors of my co-authors from other organizations, so that I can read their publications to find out if we share common research interests



What can Ricgraph do?

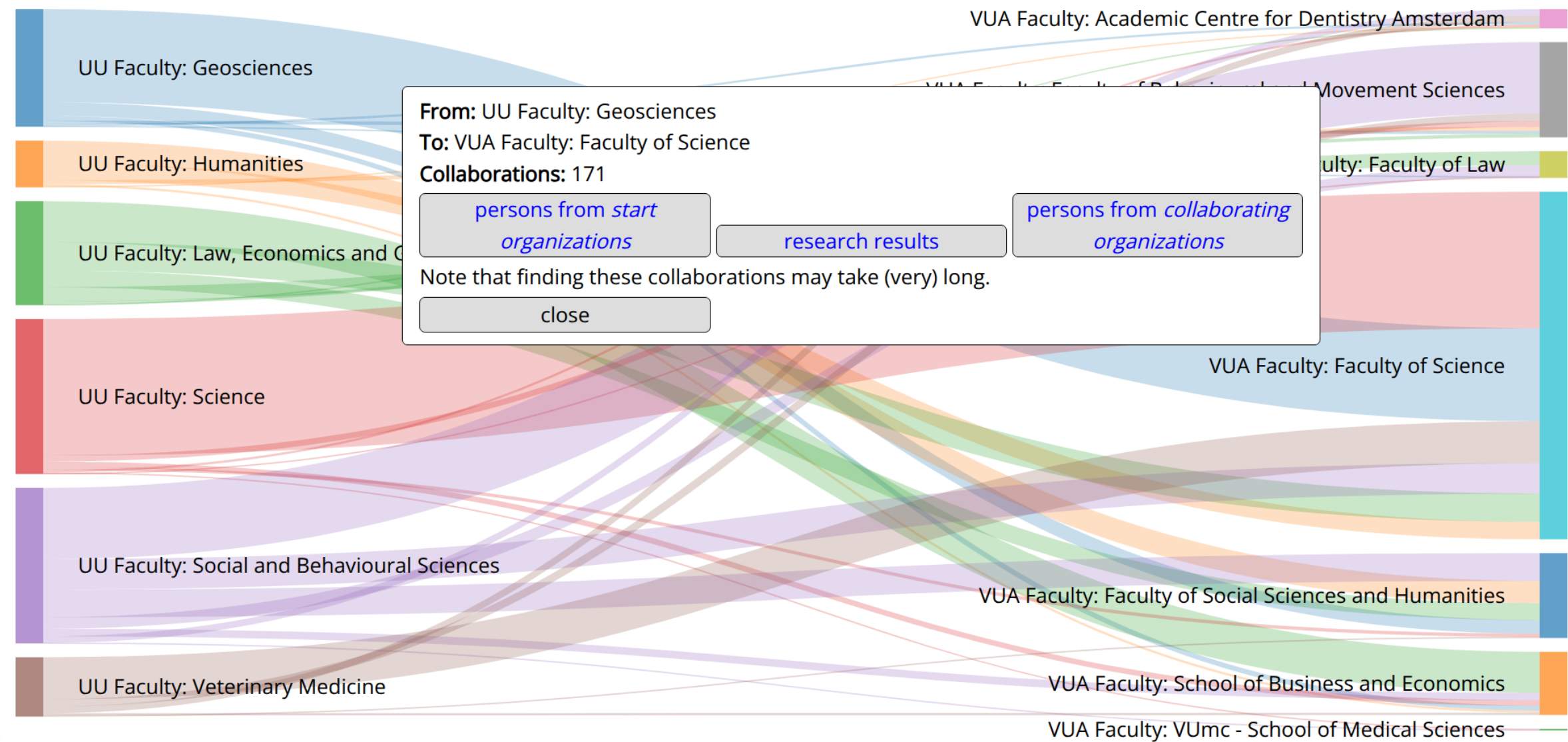
Publication collaborations

- UU and VUA faculties, 2022 – July 2025
- Total 1173 collaborations
- Example: UU Geosciences has 171 collaborations with VUA Science



What can Ricgraph do?

Publication collaborations



What can Ricgraph Publication collabor

From: UU Faculty: Geosciences
To: VUA Faculty: Faculty of Science
Collaborations: 171

persons from start organizations

research results

persons from collaborating organizations

UU Faculty: Geosciences

UU Faculty: Humanities

UU Faculty: Law, Economic and G

University of Amsterdam

Medical and Movement Sciences

VUA Faculty: Faculty of Law

VUA Faculty: Faculty of Science

Collaborations related to these organizations

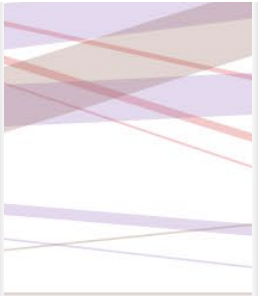
Collaborations related to these organizations

This table shows the research results that originate from the collaborations between "UU Faculty: Geosciences" and "VUA Faculty: Faculty of Science". It shows research results for the following categories: ['abstract', 'book', 'book chapter', 'conference article', 'editorial', 'entry for encyclopedia or dictionary', 'journal article', 'letter to the editor', 'memorandum', 'method description', 'patent', 'PhD thesis', 'poster', 'preprint', 'presentation', 'registered report', 'report', 'retraction', 'review', 'thesis'].

There are 171 rows in this table.									
name ▲▼	category ▲▼	value ▲▼	comment ▲▼	year ▲▼	url_main	url_other	_source	_history	
DOI	journal article	10.1016/j.jurstud.2024.103256	Social determinants of rural food security	2024	url_main link	url_other link	<ul style="list-style-type: none">OpenAlex-UUPure-UUPure-VUA	► Click for history	
DOI	journal article	10.1016/j.landusepol.2024.107234	Informing inclusive park planning	2024	url_main link	url_other link	<ul style="list-style-type: none">Pure-UUPure-VUA	► Click for history	
DOI	journal article	10.1177/10468781241271080	Using Social Media Data to Understand Citizen Perceptions of Urban Planning in a City Simulation Game	2024	url_main link	url_other link	<ul style="list-style-type: none">OpenAlex-UUPure-UUPure-VUA	► Click for history	
DOI	journal article	10.1111/1365-2664.14875	Mass-flowering lupin has positive, but limited, effect on wild bee conservation in agricultural landscapes	2025	url_main link	url_other link	<ul style="list-style-type: none">OpenAlex-UUPure-UUPure-VUA	► Click for history	
DOI	journal article	10.1016/j.eist.2024.100848	Framing for the protein transition	2024	url_main link	url_other link	<ul style="list-style-type: none">Pure-DUTPure-UUPure-VUA	► Click for history	

This table shows the persons that are participating in the collaborations between "UU Faculty: Geosciences" and "VUA Faculty: Faculty of Science". It shows collaborations for the following categories: ['abstract', 'book', 'book chapter', 'conference article', 'editorial', 'entry for encyclopedia or dictionary', 'journal article', 'letter to the editor', 'memorandum', 'method description', 'patent', 'PhD thesis', 'poster', 'preprint', 'presentation', 'registered report', 'report', 'retraction', 'review', 'thesis'].

There are 199 rows in this table.									
name ▲▼	category ▲▼	value ▲▼	comment ▲▼	year ▲▼	url_main	url_other	_source	_history	
person-root	person	6114e02a-8942-4d90-9d6b-0b132d176c51	<ul style="list-style-type: none">					► Click for history	
person-root	person	8c45777b-2f82-4684-8b0b-73cb54d16ac3	<ul style="list-style-type: none">					► Click for history	
person-root	person	1a4ce1c3-6dde-4d34-bc29-556ab5a0fc0b	<ul style="list-style-type: none">					► Click for history	
person-root	person	6f23dea9-2fd6-46c9-ae65-44d65822f44a	<ul style="list-style-type: none">					► Click for history	
person-root	person	aee33475-6774-48ef-8398-20ea9bb25300	<ul style="list-style-type: none">					► Click for history	
person-root	person	6f5f277f-8842-4327-b84c-610fd6be4601	<ul style="list-style-type: none">					► Click for history	
person-root	person	d9579e2a-330d-4624-826c-	<ul style="list-style-type: none">					► Click for	

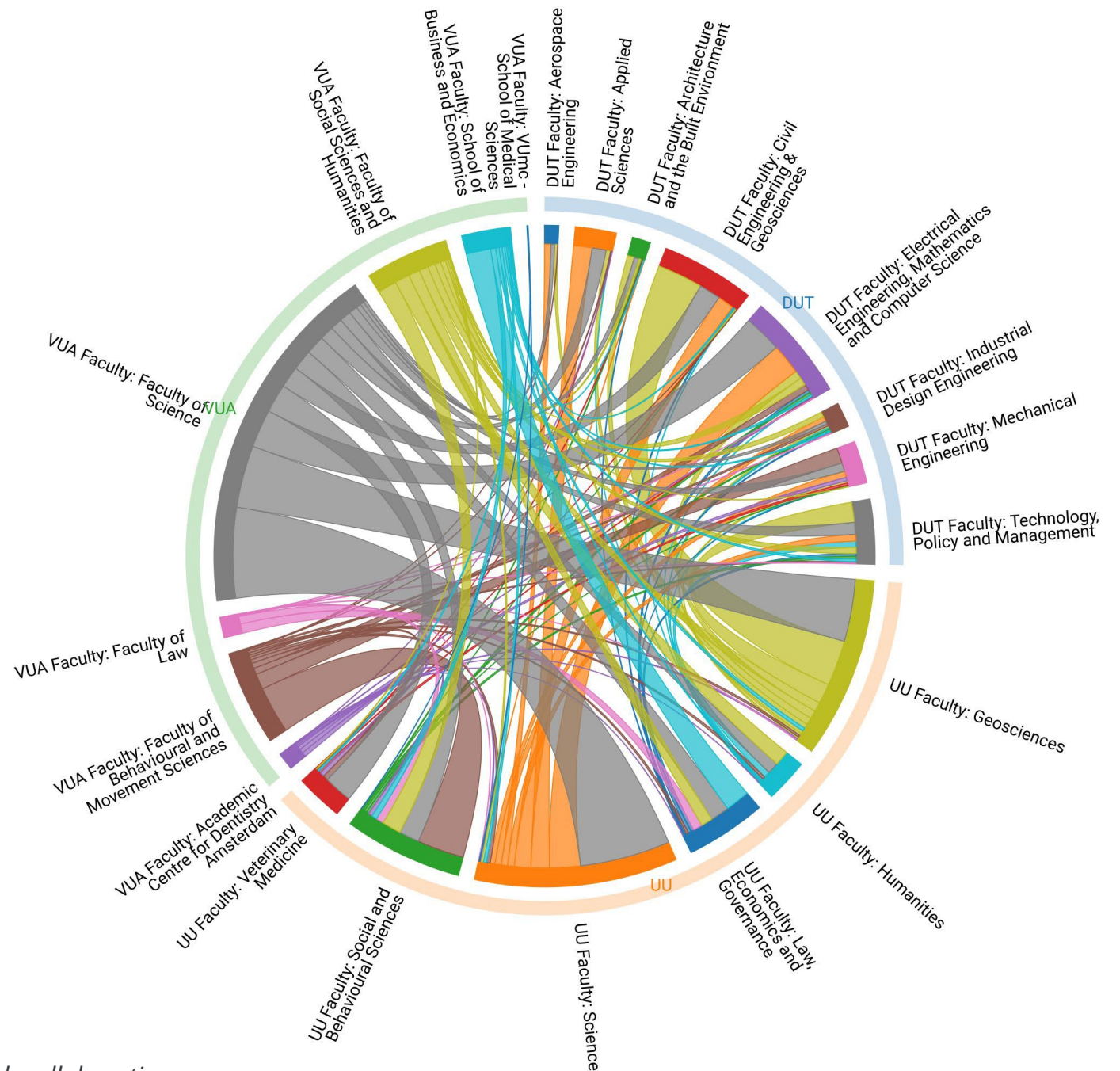


There are 145 rows in this table.									
name ▲▼	category ▲▼	value ▲▼	comment ▲▼	year ▲▼	url_main	url_other	_source	_history	
person-root	person	b631dea0-3671-4570-a168-29ada37e8364	<ul style="list-style-type: none">					► Click for history	
person-root	person	5f39a9db-ce1e-4e39-b537-cb0741db1a21	<ul style="list-style-type: none">					► Click for history	
person-root	person	86cd6e4e-36a5-4358-80b7-49b2cd48574e	<ul style="list-style-type: none">					► Click for history	
person-root	person	0580efa4-1a28-4dee-a761-0f11bf512262	<ul style="list-style-type: none">					► Click for history	
person-root	person	a89ee2ce-479e-49d1-91a0-2daa4c4741a1	<ul style="list-style-type: none">					► Click for history	
person-root	person	7fa6b03f-553a-47e1-9894-9203dcb4cfff0	<ul style="list-style-type: none">					► Click for history	
person-root	person	8893322e-9409-47ad-94f1-32eb4fc2322c	<ul style="list-style-type: none">					► Click for history	
person-root	person	5166a248-09a4-4eb0-a433-	<ul style="list-style-type: none">					► Click for	

What can Ricgraph do?

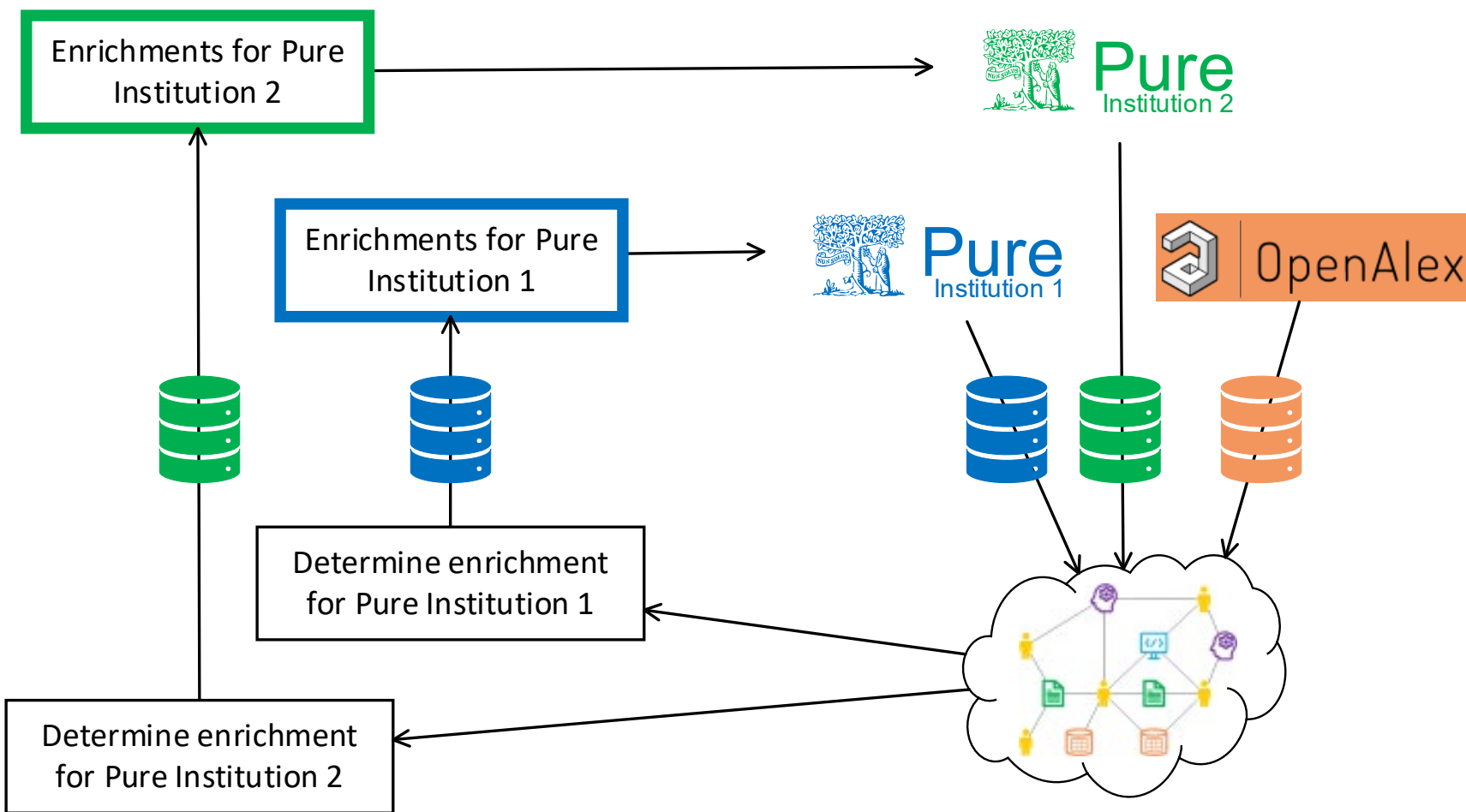
Publication collaborations

- UU, VUA, and DUT faculties, 2022 – July 2025



Ricgraph developments

Enriching Pure from OpenAlex and other Pures using BackToPure



Other developments

- Ricgraph chatbot → David Grote Beverborg
- Clean up external organizations in Pure → David
- General harvester → 6 HU students, sept 2025 – jan 2026
- Topics using AI & LLMs → 1 HU student, nov 2025 – apr 2026
- Security scan → HU students, okt 2025 – jan 2026
- Modern frontend backend UI
- Open science monitoring



How to use Ricgraph?

Install it on your own laptop or server (docs.ricgraph.eu):

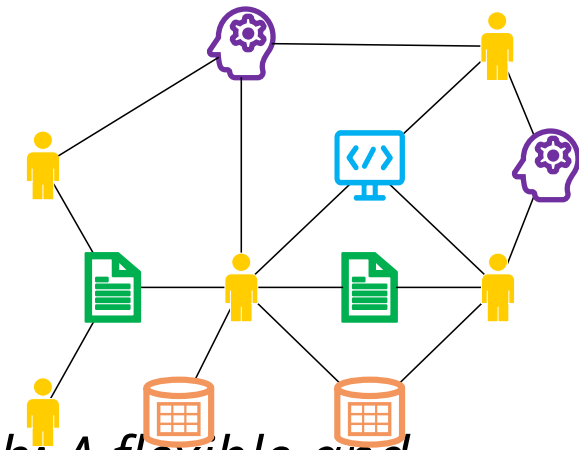
- full control
- choose your own source systems and organizations

Use the pilot Open Ricgraph demo server (explorer.ricgraph.eu):

- nothing to install
- now: DUT Pure, OpenAlex, and Research software directory
- your organization can participate! → contact me, or go to www.ricgraph.eu/pilot-project-open-ricgraph-demo-server.html

Questions





Links

- Websites: www.ricgraph.eu and docs.ricgraph.eu
- Reference publication: Rik D.T. Janssen (2024). *Ricgraph: A flexible and extensible graph to explore research in context from various systems*. SoftwareX, 26(101736). <https://doi.org/10.1016/j.softx.2024.101736>
- Rik D.T. Janssen (2025). *Utilizing Ricgraph to gain insights into research collaborations across institutions, at every organizational level*. [preprint]. <https://doi.org/10.2139/ssrn.5524439>.
- GitHub (software): <https://github.com/UtrechtUniversity/ricgraph>
- Zenodo: <https://doi.org/10.5281/zenodo.7524314>
- Explore & participate in pilot project Open Ricgraph demo server: www.ricgraph.eu/pilot-project-open-ricgraph-demo-server.html



More information, presentations, demos, install workshops:

- Rik D.T. Janssen, r.d.t.janssen@uu.nl



**Utrecht
University**

Sharing science,
shaping tomorrow



Ricgraph