

NGI Search and OpenWebSearch.EU projects

Two sister initiatives for a paradigm change in open search and discovery on the internet

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Common introduction

What is NGI Search?

The NGI Search project is a European project designed to support entrepreneurs, tech-geeks, developers, and socially engaged people, who are capable of challenging the way we **search and discover** information and resources on the internet.

Scope:

to change the way we use and experience, search and discover data and resources on the internet and web by addressing different challenges / topics whilst focused on European values of **openness, transparency, privacy and trust.**

Applicants:

- Natural Persons or organisations
- Apply individually or as a consortium: 3 members per team

What is OpenWebSearch.EU?



OWS.EU is the first project funded by the EU to develop an **open European infrastructure for web search**. 14 renowned European research and computing centers collaborate a time-frame of at least 3 years. Main goal of the project is

the creation of an Open Web Index

to facilitate an open access to web information, following Europe's values, legislation and standards.

NGI Search

Project Partners

Pierre-Yves Gibello

LINKNOVATE

AARHUS UNIVERSITET **CW2**

UNIVERSIDAD DE MURCIA

Topics

Open Calls


NGI Search will organise five Open Calls for innovative projects whereby selected applicants will benefit from the *financial support* of up to 150,000€ as well as *technical, business and innovation support* over 12 months.

OC1 Topics

Technological-based. Evaluation is ongoing until the end of February '23.

- Intelligent Voice Based Assistants
- Natural Language Processing
- Semantic analysis
- Social computing
- Data visualization
- New ways of discovering and accessing information

OC2 Topics

 The second call opens on 1st April 2023

Research-oriented

- Power cognitive search by reinforcement learning.
Reinforcement learning systems that learn from the interactions how to choose the data and algorithms **to make a search more relevant**.
- Machine-based data (IoT).
Search / pattern extraction algorithms that can adapt to the characteristics of the IoT sources.

OC2 Topics

- AI-based taxonomies
Automatic creation and expansion of taxonomies by means of AI techniques that model inter-dependency among new concepts.
- Network analysis - knowledge graphs
An interlinked network of distributed resources that can be queried is known as a knowledge graph. Formal semantics to derive conclusions in a query should be addressed. Scalability, quality of the induced models, diversity of the managed data, and dynamicity.

OC2 Topics

- AI-based search tools and content generators.
AI-based search and content-generating tools : chatGPT, GitHub copilot, Copy AI.... Evaluate the privacy of this kind of tools as well as opportunities in terms of search, research gaps, performance, etc.
- Ethics in search and discovery.
Human rights, from privacy and data confidentiality to gender/minority equality, freedom of choice and freedom of conscience.
- New ways of discovering and accessing information

Methodology

Methodology

(1) Technical support

- Technology mentoring and advice on technologies
- Beta testing — ReachOut beta-testing platform
- Efforts to link to Standards and Foundations

(2) Business support

- Market Readiness Level¹ facilitates adoption of open source by decision-makers.
- Pitch training
- Business modeling and coaching

(3) Innovation management

- Open source licensing
- Market landscaping and research
- Open science advice

¹<https://www.ow2.org/view/MRL/>

Conclusion

Conclusion

For the next 3 years, 5 open calls will offer the opportunity to perform equity-free research and development on search, indexing and discovery. NGI Search projects will foster strong synergies with the NGI mission on a more human centric internet with focus on privacy and trust as key concepts.

The core values are

- open source
- contributions to the wider internet community
- collaboration between deep tech and industry, innovation and standardisation
- open science principles as well as transversal challenges including gender equality and sustainability.

OpenWebSearch.EU

Project partners

Research



NGOs



Infrastructure



Businesses



Motivation

Opening up the search engine market

The oligopoly on the critical infrastructure *web search* (Google with ~ 90% market share in Europe) has a number of negative effects.

⇒ More plurality

«The free, open and unbiased access to web information can't be ensured if it lays in the hands of just a few gatekeepers. »

Tapping the web as resource



Web data drives innovations beyond search, particularly in AI

Project Goal

Collaborative development of Open Web Index

The project goals are:

- developing the core of an **Open Web Index (OWI)**, and
- building an ecosystem around the OWI and its data services to make it publicly available.

It serves as a feasibility study for a **distributed** and **collaborative** Web Index.

- establishing a collaborating network of European HPC-infrastructure

The vision is to support **businesses and research on web search and analysis** which build upon the OWI infrastructure and profit from the open access to web data.

Open Calls

Open Third-Party Calls

The OWS.EU project wants to involve the community through **three public calls** to contributors with a volume of 1.3M €.

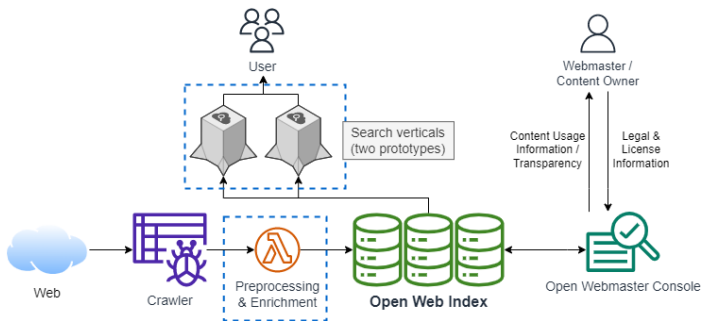
Call 1 Preannouncement

- 📣 Opens on 1st of March 2023
- 📌 Applications accepted until 30th of April 2023
- € Successful applications can request funding between 25,000 and 120,000 € for a funding period of 12 months

The first call consists of two tracks:

- Track 1: Conceptual contributions on legal, business and social aspects of Open Search
- Track 2: Technical approaches to legally compliant data acquisition considering societal constraints

Further opportunities for contributions



- Development of search and discovery applications
 - building vertical search engines on top of the OWI pilot infrastructure, or
 - extending the infrastructure with new content analysis methods

Conclusion

Conclusion

The OpenWebSearch.EU project wants to open up web search towards more plurality.

Therefore, the project partners collaboratively create an Open Web Index and make it publicly available.

Researchers, innovators and businesses can contribute to this project by

- developing business ideas and data services that build upon the Open Web Index infrastructure
- involving in one of the three public calls



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Thank you very much!

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