Objective

From edge to cloud, big data analytics is growing fast, and its energy consumption has become a reason of concern for national grids and they generate significant carbon emissions. The GLACIATION project aims to address this issue through energy-efficient data operations. By developing a novel Distributed Knowledge Graph (DKG) that stretches across the edge-core-cloud architecture, reduction in the energy consumption for data processing will be achieved through AI enforced minimal data movement operations. GLACIATION will achieve significant power consumption reduction through optimizing the location where analytics are carried out. The projects Meta Data framework will provide tools that incorporate privacy and trust aspects in the data operations. GLACIATION is demonstrated on three relevant industry settings which benefit from optimized data movement and power...
consumption reduction. More specifically, GLACIATION use cases cover public-service, manufacturing, and enterprise data analytics.

**Fields of science**

natural sciences › computer and information sciences › data science › big data
natural sciences › earth and related environmental sciences › physical geography › glaciology
natural sciences › computer and information sciences › data science › data processing

**Programme(s)**

HORIZON.2.4 - Digital, Industry and Space
HORIZON.2.4.7 - Advanced Computing and Big Data

**Topic(s)**

HORIZON-CL4-2021-DATA-01-01 - Technologies and solutions for compliance, privacy preservation, green and responsible data operations (AI, Data and Robotics Partnership) (RIA)

**Call for proposal**

HORIZON-CL4-2021-DATA-01

See other projects for this call

**Funding Scheme**

HORIZON-AG - HORIZON Action Grant Budget-Based

**Coordinator**

MINISTERO DELL'ECONOMIA E DELLE FINANZE

Net EU contribution

€ 576 875,00

Address

Via Xx Settembre 97
00187 Roma
Italy
Participants (13)

EMC INFORMATION SYSTEMS INTERNATIONAL UNLIMITED COMPANY
Ireland
Net EU contribution
€ 1 145 750,00
Address
Ida Industrial Site
P31 Ovens
Region
Ireland > Eastern and Midland > Dublin
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network
Non-EU contribution
€ 0,00

HIRO MICRODATACENTERS B.V.
Netherlands
Princes Marijkekade 11
2273 AB Voorburg

SME
Yes

West-Nederland > Zuid-Holland > Agglomeratie 's-Gravenhage

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Net EU contribution
€ 1 002 000,00

Non-EU contribution
€ 0,00
THE LISBON COUNCIL FOR ECONOMIC COMPETITIVENESS ASBL

Belgium
Net EU contribution
€ 300 625,00

Address
Rue De La Loi 155 Residence Palace Ipc
1040 Bruxelles

Region
Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest > Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest > Arr. de Bruxelles-Capitale/Arr. Brussels-Hoofdstad

Activity type
Other

Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Non-EU contribution
€ 0,00

--------------------------------------------------

UNIVERSITA DEGLI STUDI DI MILANO

Italy
Net EU contribution
€ 672 500,00

Address
Via Festa Del Perdono 7
20122 Milano

Region
Nord-Ovest > Lombardia > Milano

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Non-EU contribution
UNIVERSITÀ DEGLI STUDI DI BERGAMO

Net EU contribution
€ 616,250,00

Address
Via Salvecchio 19
24129 Bergamo

Region
Nord-Ovest > Lombardia > Bergamo

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Non-EU contribution
€ 0,00

GEIE ERCIM

Net EU contribution
€ 570,000,00

Address
Route Des Lucioles 2004 Sophia Antipolis
06410 Biot

SME
Yes

Region
Provence-Alpes-Côte d’Azur > Provence-Alpes-Côte d’Azur > Alpes-Maritimes

Activity type
Other

Links
Contact the organisation
Website
EURECOM GIE

France

Net EU contribution

€ 469,513.75

Address

Route Des Chappes 450 Campus Sophia Antipolis
06410 Biot

Region

Provence-Alpes-Côte d'Azur > Provence-Alpes-Côte d'Azur > Alpes-Maritimes

Activity type

Higher or Secondary Education Establishments

Links

Contact the organisation  Website  Participation in EU R&I programmes  HORIZON collaboration network

Non-EU contribution

€ 0,00

SAP SE

Germany

Net EU contribution

€ 700,000.00

Address

Dietmar Hopp Allee 16
69190 Walldorf

Region

Baden-Württemberg > Karlsruhe > Rhein-Neckar-Kreis

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)
UNIVERSITY COLLEGE CORK - NATIONAL UNIVERSITY OF IRELAND, CORK

Ireland

Net EU contribution
€ 333 900,00

Address
Western Road
T12 YN60 Cork

Region
Ireland > Eastern and Midland > Dublin

Activity type
Higher or Secondary Education Establishments

SOGEI-SOCIETA GENERALE D'INFORMATICA SPA

Italy

Net EU contribution
€ 417 500,00

Address
Via Mario Carucci 99
00143 Roma

Region
Centro (IT) > Lazio > Roma

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
LAKESIDE LABS GMBH

Austria

Net EU contribution
€ 513 750,00

Address
Lakeside Park B04b 1 Stock
9020 Klagenfurt Am Worthersee

Region
Südösterreich > Kärnten > Klagenfurt-Villach

Activity type
Research Organisations

ENGINEERING - INGEGNERIA INFORMATICA SPA

Italy

Net EU contribution
€ 587 500,00

Address
Piazzale Dell'agricoltura 24
00144 Roma
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation 🌐  Website 🌐
Participation in EU R&I programmes 🌐
HORIZON collaboration network 🌐

Non-EU contribution
€ 0,00

Partners (1)

EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH

Switzerland

Net EU contribution
€ 0,00

Address
Raemistrasse 101
8092 Zuerich 🗺

Region
Schweiz/Suisse/Svizzera > Zürich > Zürich

Activity type
Higher or Secondary Education Establishments

Links

Contact the organisation 🌐  Website 🌐
Participation in EU R&I programmes 🌐
HORIZON collaboration network 🌐

Non-EU contribution
€

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