Semantic Low-code Programming Tools for Edge Intelligence

Fact Sheet

Project Information

SMARTEDGE

Grant agreement ID: 101092908

DOI
10.3030/101092908

EC signature date
23 November 2022

Funded under
Digital, Industry and Space

Total cost
€ 7 353 640,00

EU contribution
€ 7 353 640,00

Coordinated by
CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE TELECOMUNICAZIONI
Italy

Start date
1 January 2023

End date
31 December 2025

Project description

Harnessing the power of swarm intelligence in AI

Swarm intelligence consists of a network of endpoint devices that are able to generate and process data at source. An entire network becomes more intelligent and flexible when individual edge devices can identify and share vital information with peers. From healthcare systems to self-driving vehicles, sharing this information must be done without compromising reliability, security, privacy and scalability. The EU-funded SMARTEDGE project will provide a solution in a low-code programming environment using three tools: continuous semantic integration, a dynamic swarm
network and a low-code toolchain for edge intelligence. The solution will be
demonstrated in the automotive and health sectors, among others.

Fields of science

engineering and technology  >  electrical engineering, electronic engineering, information engineering  >
information engineering  >  telecommunications  >  telecommunications networks  >  data networks  
natural sciences  >  computer and information sciences

Keywords

continuous semantic integration  Dynamic Swarm Networking
Low-code Programming Tools for Edge Intelligence

Programme(s)

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

Topic(s)

HORIZON-CL4-2022-DATA-01-03 - Programming tools for decentralised intelligence and swarms (RIA)

Call for proposal

HORIZON-CL4-2022-DATA-01

See other projects for this call

Funding Scheme

HORIZON-RIA - HORIZON Research and Innovation Actions

Coordinator
CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE TELECOMUNICAZIONI

Net EU contribution
€ 555 000,00

Address
VIALE G. P. USBERTI 181A
43124 Parma
Italy

SME
Yes

Region
Nord-Est > Emilia-Romagna > Parma

Activity type
Higher or Secondary Education Establishments

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

Total cost
€ 555 000,00

Participants (11)

TECHNISCHE UNIVERSITAT BERLIN

Germany

Net EU contribution
€ 1 097 579,75

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STRASSE DES 17 JUNI 135
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Berlin > Berlin > Berlin

Activity type
Higher or Secondary Education Establishments
**AALTO KORKEAKOULUSAATIO SR**

Finland

Net EU contribution

€ 458 750,00

Address

OTAKAARI 1
02150 Espoo

Region

Manner-Suomi > Helsinki-Uusimaa > Helsinki-Uusimaa

Activity type

Higher or Secondary Education Establishments

Total cost

€ 458 750,00

**Conveqs Oy**

Finland

Net EU contribution

€ 602 500,00

Address

Punavuorenkatu 23 G 154
00150 Helsinki

SME

Yes
**ROBERT BOSCH GMBH**  
Germany  
Net EU contribution  
€ 618,275,00  
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ROBERT-BOSCH-PLATZ 1  
70839 Gerlingen-Schillerhoehe  
Region  
Baden-Württemberg > Stuttgart > Ludwigsburg  
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  
Total cost  
€ 618,275,00

**SIEMENS AKTIENGESELLSCHAFT**  
Germany  
Net EU contribution  
€ 835,410,25  
Address
WERNER-VON-SIEMENS-STR. 1
80333 Munchen

Region
Bayern > Oberbayern > München, Kreisfreie Stadt

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

Total cost
€ 835 410,25

GEIE ERCIM
France
Net EU contribution
€ 458 750,00

Address
ROUTE DES LUCIOLES 2004 SOPHIA ANTIPOLIS
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SME Yes
Region
Provence-Alpes-Côte d’Azur > Provence-Alpes-Côte d’Azur > Alpes-Maritimes

Activity type
Other

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

Total cost
€ 458 750,00

EMC INFORMATION SYSTEMS INTERNATIONAL UNLIMITED COMPANY
Ireland
Net EU contribution
€ 827 750,00
Address
IDA INDUSTRIAL SITE
P31 Ovens
Region
Ireland > Southern > South-West
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
Total cost
€ 827 750,00

CEFRIEL SOCIETA CONSORTILE A RESPONSABILITA LIMITATA SOCIETA'
BENEFIT
Italy
Net EU contribution
€ 329 500,00
Address
VIALE SARCA 226
20126 Milano
SME
Yes
Region
Nord-Ovest > Lombardia > Milano
Activity type
Research Organisations
Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network
**MELLANOX TECHNOLOGIES LTD - MLNX**

**Israel**

Net EU contribution

€ 515 625,00

Address

YOKNEAM ILIT INDUSTRIAL ZONE - HERMON BUILDING

20692 Yokneam

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

**IMC- INDUSTRIAL MANAGEMENT CONSULTING SLOVAKIA, S.R.O.**

**Slovakia**

Net EU contribution

€ 288 250,00

Address

HLAVNA 84

900 90 Dubova

SME

Yes

Region

Slovensko > Bratislavský kraj > Bratislavský kraj

Activity type

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

Links
**FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV**

Germany

Net EU contribution

€ 766 250,00

Address

HANSASTRASSE 27C
80686 München

Region

Bayern > Oberbayern > München, Kreisfreie Stadt

Activity type

Research Organisations

Links

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

Total cost

€ 766 250,00

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**UNIVERSITE DE FRIBOURG**

Switzerland

Net EU contribution

€ 0,00

Address
AVENUE DE L EUROPE 20
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Region
Schweiz/Suisse/Svizzera > Espace Mittelland > Fribourg / Freiburg

Activity type
Higher or Secondary Education Establishments

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

Total cost
No data

HAUTE ECOLE SPECIALISEE DE SUISSE OCCIDENTALE

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Net EU contribution
€ 0,00

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2800 Delemont

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Schweiz/Suisse/Svizzera > Espace Mittelland > Jura

Activity type
Higher or Secondary Education Establishments

Links
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Total cost
No data

THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD

United Kingdom
Net EU contribution

€ 0,00

Address

WELLINGTON SQUARE UNIVERSITY OFFICES
OX1 2JD Oxford

Region

South East (England) > Berkshire, Buckinghamshire and Oxfordshire > Oxfordshire

Activity type

Higher or Secondary Education Establishments

Links

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Total cost

No data

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