Artificial Intelligence plays a central role in societies, economies and industries around the world. However, there has been a lack of AI integration in Europe. As a result, potential users are not sufficiently supported despite the benefits it can provide to all branches of the industry and its digitisation. The EU-funded AI4DI project aims to transfer machine learning (ML) and AI from the cloud to the digitising industry. It will use a seven-key-target approach to evaluate and improve its relevance within the industry. The project plans to connect factories, processes and devices within the digitised industry by utilising ML and AI. It will then collect data on their performance.
Objective

Europe has a lack of intellectual property in integrating artificial intelligence (AI) into digital applications. This is critical since the automatization reached saturated levels and AI in digitisation is an accepted approach for the upcoming transformation of the European industry. The potential of AI in economy and society is by far not enough exploited. Potential users of AI are not sufficiently supported to facilitate the integration of AI into their applications. Enabling of performance, industry and humanity by AI for digitising industry is the key to push the AI revolution in Europe and step into the digital age. Existing services providing state of the art machine learning (ML) and artificial intelligence solutions are currently available in the cloud. In this project, we aim to transfer machine learning and AI from the cloud to the edge in manufacturing, mobility and robotics. To achieve these targets we connect factories, processes, and devices within digitised industry by utilizing ML and AI for human machine collaboration, change detection, and detection of abnormalities. Hence, we gain knowledge by using existing data and arrange them into a processable representation or collect new data. We use this knowledge to change the semantics and the logical layer with a distributed system intelligence for e.g. quality control, production optimization. In AI4DI, we define a 7-key-target-approach to evaluate the relevance of AI methods within digitised industry. Each key target represents a field of activity and the corresponding target at the same time, dividing systems into heterogenous and homogenous systems, and evolving a common AI method understanding for these systems as well as for human machine collaboration. Furthermore, we investigate, develop and apply AI tools for change detection and distributed system intelligence, and develop hardware and software modules as internet of things (IoT) devices for sensing, actuating, and connectivity processing.

Fields of science

natural sciences > computer and information sciences > internet > internet of things
natural sciences > computer and information sciences > software
social sciences > political sciences > political transitions > revolutions
engineering and technology > electrical engineering, electronic engineering, information engineering > electronic engineering > robotics
natural sciences > computer and information sciences > artificial intelligence > machine learning

Programme(s)

H2020-EU.2.1.1. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT) MAIN PROGRAMME

H2020-EU.2.1.1.7. - ECSEL
Topic(s)


Call for proposal

H2020-ECSEL-2018-2-RIA-two-stage

See other projects for this call

Sub call

H2020-ECSEL-2018-2-RIA-two-stage-1

Funding Scheme

ECSEL-RIA - ECSEL Research and Innovation Action

Coordinator

INFINEON TECHNOLOGIES AG

Net EU contribution

€ 950 000,94

Address

Am Campeon 1-15
85579 Neubiberg
Germany

Region

Bayern > Oberbayern > München, Landkreis

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

€ 2 850 002,81
AUDI AKTIENGESELLSCHAFT

Germany

Net EU contribution

€ 500 593,75

Address

Auto-union-str. 1
85057 Ingolstadt

Region

Baden-Württemberg > Stuttgart > Stuttgart, Stadtkreis

Activity type

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

Links

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

Non-EU contribution

€ 1 501 781,25

FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV

Germany

Net EU contribution

€ 199 635,19

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

Non-EU contribution
€ 370 751,06

TECHNISCHE UNIVERSITAET DRESDEN
Germany
Net EU contribution
€ 336 325,50
Address
Helmholtzstrasse 10
01069 Dresden
Region
Sachsen > Dresden > Dresden, Kreisfreie Stadt
Activity type
Higher or Secondary Education Establishments
Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network
Non-EU contribution
€ 624 604,50

TECHNISCHE UNIVERSITAET MUENCHEN
Germany
Net EU contribution
€ 259 135,19
Address
Arcisstrasse 21
80333 Muenchen
Region
Bayern > Oberbayern > München, Kreisfreie Stadt
Activity type
Higher or Secondary Education Establishments
Links
Contact the organisation Website
AVL LIST GMBH

Austria

Net EU contribution
€ 424 511,25

Address
Hans-list-platz 1
8020 Graz

Region
Südösterreich > Steiermark > Graz

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
€ 1 273 533,75

INFINEON TECHNOLOGIES AUSTRIA AG

Austria

Net EU contribution
€ 238 035,31

Address
Siemensstrasse 2
9500 Villach

Region
Südösterreich > Kärnten > Klagenfurt-Villach

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
**KAI KOMPETENZZENTRUM AUTOMOBIL - UND INDUSTRIEELEKTRONIK GMBH**

Austria  
Net EU contribution  
€ 61,964.69

**Address**

Europastrasse 8  
9524 Villach St Magdalen

**Region**

Südösterreich > Kärnten > Klagenfurt-Villach

**Activity type**

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

**Non-EU contribution**

€ 185,894.06

---

**TECHNISCHE UNIVERSITAET GRAZ**

Austria  
Net EU contribution  
€ 128,335.38

**Address**

Rechbauerstrasse 12  
8010 Graz

**Region**

Südösterreich > Steiermark > Graz

**Activity type**

Higher or Secondary Education Establishments

---

**Non-EU contribution**

€ 714,105.94
VIRTUAL VEHICLE RESEARCH GMBH
Austria
Net EU contribution
€ 199 062,50
Address
Inffeldgasse 21 A
8010 Graz
SME
Yes
Region
Südösterreich > Steiermark > Graz
Activity type
Research Organisations
Non-EU contribution
€ 369 687,50

VYSOKE UCENI TECHNICKE V BRNE
Czechia
Net EU contribution
€ 191 154,25
Address
Antoninska 548/1
601 90 Brno Stred
Jihovýchod > Jihomoravský kraj

Higher or Secondary Education Establishments

Non-EU contribution
€ 355 000,75

INSTITUT MIKROELEKTRONICKÝCH APLIKACÍ SRO
Czechia

Net EU contribution
€ 108 750,00

Address
Na Valentince 1003/1 Smichov
150 00 Praha 5

SME
Yes

Region
Praha > Hlavní město Praha

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

Non-EU contribution
€ 253 750,00

STMICROELECTRONICS SRL
Italy

Net EU contribution
€ 369 356,25
Address
Via C. olivetti 2
20864 Agrate Brianza

Region
Nord-Ovest > Lombardia > Monza e della Brianza

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
€ 1 108 068,75

---

DP CONTROL SRL
Italy

Net EU contribution
€ 0,00

Address
Via Napoli 55
84014 Nocera Inferiore

Region
Sud > Campania > Salerno

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

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

Non-EU contribution
€ 0,00

---

CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LA NANOELETTRONICA
Italy

Net EU contribution
€ 0,44
Address
Via Toffano 2
40125 Bologna
Region
Nord-Est > Emilia-Romagna > Bologna
Activity type
Research Organisations

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

Non-EU contribution
€ 0,81

THIRD-PARTY
POLITECNICO DI MILANO
Italy
Net EU contribution
€ 141 750,00
Address
Piazza Leonardo Da Vinci 32
20133 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
€ 263 250,00

THIRD-PARTY
ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA
Italy
Net EU contribution
€ 212 624,56
**SCM GROUP SPA**

Italy

Net EU contribution

€ 147 906,25

Address

Via Emilia 77
47900 Rimini

Region

Nord-Est > Emilia-Romagna > Rimini

Activity type

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

Links

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

Non-EU contribution

€ 443 718,75

---

**THIRD-PARTY**

CSR CONSORZIO STUDI E RICERCHE SRL

Italy

Net EU contribution

---

12 of 29
€ 31 250,00

Address
Via Emilia 77
47921 Rimini

Region
Nord-Est > Emilia-Romagna > Rimini

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

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

Non-EU contribution
€ 93 750,00

---

TTTECH COMPUTERTECHNIK AG

Austria

Net EU contribution
€ 71 095,93

Address
Schonbrunner Strasse 7
1040 Wien

Region
Wien > Wien

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
€ 213 287,82

---

SINTEF AS

Norway
Net EU contribution
€ 217 000,00

Address
Strindvegen 4
7034 Trondheim

Region
Norge > Trøndelag > Trøndelag

Activity type
Research Organisations

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

Non-EU contribution
€ 403 000,00

---

ELEKTRONIKAS UN DATORZINATNU INSTITUTS

Latvia

Net EU contribution
€ 113 050,00

Address
Dzerbenes iela 14
1006 Riga

Region
Latvija > Latvija > Riga

Activity type
Research Organisations

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

Non-EU contribution
€ 209 950,00

---

INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE INCORPORATED
Taiwan

Address
Chunhsing Road 195 Section 4
310 Chutung

Activity type
Research Organisations

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

Non-EU contribution
€ 0,00

---

INTERUNIVERSITAIR MICRO-ELECTRONICA CENTRUM

Belgium

Address
Kapeldreef 75
3001 Leuven

Region
Vlaams Gewest > Prov. Vlaams-Brabant > Arr. Leuven

Activity type
Research Organisations

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

Non-EU contribution
€ 781 431,62

---

UAB TERAGLOBUS

Lithuania
Net EU contribution
€ 141,375.00

Address
Sav Lindinskių K Bajoru G 14/1
Vilniaus

SME
Yes

Region
Lietuva > Sostinės regionas > Vilniaus apskritis

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

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

Non-EU contribution
€ 329,875.00

VILNIAUS GEDIMINO TECHNIKOS UNIVERSITETAS

Lithuania
Net EU contribution
€ 19,005.00

Address
Sauletekio Al 11
LT-10223 Vilnius

Region
Lietuva > Sostinės regionas > Vilniaus apskritis

Activity type
Higher or Secondary Education Establishments

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

Non-EU contribution
€ 35,295.00
STMICROELECTRONICS GRENOBLE 2 SAS

France

Net EU contribution
€ 498 153,13

Address
Rue Jules Horowitz 12
38000 Grenoble

Region
Auvergne-Rhône-Alpes > Rhône-Alpes > Isère

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
€ 1 494 459,37

COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES

France

Net EU contribution
€ 271 602,63

Address
Rue Leblanc 25
75015 Paris 15

Region
Ile-de-France > Ile-de-France > Paris

Activity type
Research Organisations

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

Non-EU contribution
€ 504 404,87
### TECHNEXT

**France**

Net EU contribution

€ 117 243,75

**Address**

8 Avenue Saint Jean 
06400 Cannes  🇫🇷

SME

Yes

**Region**

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

**Activity type**

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

**Links**

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

Non-EU contribution

€ 273 568,75

---

### UNIVERSITE DE REIMS CHAMPAGNE-ARDENNE

**France**

Net EU contribution

€ 122 675,00

**Address**

2 Avenue Robert Schuman 
51100 Reims  🇫🇷

Region

Grand Est > Champagne-Ardenne > Marne

**Activity type**

Higher or Secondary Education Establishments

**Links**

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

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<td>Avenue Felix Viallet 46</td>
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<td>38031 Grenoble Cedex 1</td>
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<tr>
<td>621 Avenue Centrale</td>
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<tr>
<td>38058 Grenoble</td>
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<tr>
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</tr>
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</table>
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS
France

Net EU contribution
€ 2 211,09

Address
Rue Michel Ange 3
75794 Paris

Region
Ile-de-France > Ile-de-France > Paris

Activity type
Research Organisations

DENOFA AS
Norway

Net EU contribution
€ 135 171,88

Address
Oraveien 15 B
1630 Gamle Fredrikstad

Region
Norge > Oslo og Viken > Viken

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

Non-EU contribution
€ 4 346,87

Non-EU contribution
€ 4 106,31

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

Non-EU contribution
€ 405,515.62

IGLOBALTRACKING AS
Norway
Net EU contribution
€ 7,678.20

Address
Torpomen 1
3579 Torpo

SME
Yes

Region
Norge > Oslo og Viken > Viken

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

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

Non-EU contribution
€ 17,915.81

NXTECH AS
Norway
Net EU contribution
€ 158,259.30

Address
K G Meldahlsvei 9
1671 Krakeroy

SME
Yes

Region
Norge > Oslo og Viken > Viken

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
€ 369 271,69

---

NETCOMPANY - INTRASOFT
Belgium
Net EU contribution
€ 207 500,00

Address
Place Du Champ De Mars 5/10
1050 Bruxelles

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

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

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

Non-EU contribution
€ 622 500,00

---

INFORMATION TECHNOLOGY FOR MARKET LEADERSHIP
Greece
Net EU contribution
€ 140 625,00

Address
Katechaki 22
Katechaki 22
115 25 Athina

SME
Yes

Region
Κεντρικός Τομέας Αθηνών > Αττική > Αττική

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

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

Non-EU contribution
€ 328 125,00

---

KNOW-CENTER GMBH RESEARCH CENTER FOR DATA-DRIVEN BUSINESS & BIG DATA ANALYTICS

Austria

Net EU contribution
€ 149 999,94

Address
Inffeldgasse 13/6
8010 Graz

Region
Südösterreich > Steiermark > Graz

Activity type
Research Organisations

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

Non-EU contribution
€ 278 571,31

---

MURATA ELECTRONICS OY

Net EU contribution
€ 278 571,31
Finland
Net EU contribution
€ 85 812,50
Address
Myllynkivenkuja 6
01620 Vantaa
Region
Manner-Suomi > Helsinki-Uusimaa > Helsinki-Uusimaa
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network
Non-EU contribution
€ 257 437,50

TEKNOLOGIAN TUTKIMUSKESKUS VTT OY
Finland
Net EU contribution
€ 340 552,19
Address
Tekniikantie 21
02150 Espoo
Region
Manner-Suomi > Helsinki-Uusimaa > Helsinki-Uusimaa
Activity type
Research Organisations
Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network
Non-EU contribution
€ 632 454,06
V Ranken-Pommery-Monopole
France
Net EU contribution
€ 105 851,88

Address
5 Place Du General Gouraud
51100 Reims

Region
Grand Est > Champagne-Ardenne > Marne

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

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

Non-EU contribution
€ 317 555,62

Ostbayerische Technische Hochschule Amberg-Weiden
Germany
Net EU contribution
€ 228 533,38

Address
Kaiser Wilhelm Ring 23
92224 Amberg

Region
Bayern > Oberpfalz > Amberg, Kreisfreie Stadt

Activity type
Higher or Secondary Education Establishments

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

Non-EU contribution
€ 424 419,12
VAISTO SOLUTIONS OY
Finland
Net EU contribution
€ 143 842,50
Address
Hermiankatu 6/8
33720 Tampere
SME Yes
Region
Manner-Suomi > Länsi-Suomi > Pirkanmaa
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network
Non-EU contribution
€ 335 632,50

COGNITION FACTORY GMBH
Germany
Net EU contribution
€ 138 375,00
Address
Frei-otto-str. 22
80797 Munchen
SME Yes
Region
Bayern > Oberbayern > München, Kreisfreie Stadt
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Non-EU contribution
€ 322,875,00

SYMATE GMBH

Germany

Net EU contribution
€ 100,125,00

Address
Georg Treu Platz 3
01067 Dresden

SME
Yes

Region
Sachsen > Dresden > Dresden, Kreisfreie Stadt

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

Links

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

Non-EU contribution
€ 233,625,00

TTTECH INDUSTRIAL AUTOMATION AG

Austria

Net EU contribution
€ 74,805,63

Address
Schonbrunnerstrasse 7
1040 Wien

Region
Wien > Wien

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
INTELLECTUAL LABS AS
Norway
Net EU contribution
€ 131 062,50

Address
Dronning Eufemias Gate 16
0191 Oslo

SME
Yes

Region
Norge > Oslo og Viken > Oslo

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

EC signature date: 13 May 2019
Last update: 11 October 2022
Record number: 223288

Permalink: https://cordis.europa.eu/project/id/826060

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