An artificial intelligence boost for European industry

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

Other funding
€ 2 850 002,81
Participants (50)

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

Other funding
€ 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
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

Other funding

€ 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
Other funding
€ 1 273 533,75

INFINEON TECHNOLOGIES AUSTRIA AG
Austria
Net EU contribution
€ 234 794,97
Address
Siemensstrasse 2
9500 Villach
Region
Südösterreich > Kärnten > Klagenfurt-Villach
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Links

KAI KOMPETENZZENTRUM AUTOMOBIL - UND INDUSTRIEELEKTRONIK GMBH
Austria
Net EU contribution
€ 65 205,03
Address
Europastrasse 8
9524 Villach St Magdalen
Region
Südösterreich > Kärnten > Klagenfurt-Villach
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Other funding
€ 195 615,08

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
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
Other funding
€ 369 687,50

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

Jihovýchod > Jihomoravský kraj

Activity type

Higher or Secondary Education Establishments

Links

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

Other funding

€ 355 000,75

---

INSTITUT MIKROELEKTRONICKÝCH APLIKACÍ SRO

Czechia

Net EU contribution

€ 108 750,00

Address

Na Valentince 1003/1 Smíchov
150 00 Praha 5

SME

Yes

Region

Praha > Hlavní město Praha

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

Other funding

€ 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  

Other funding
€ 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  

Other funding
€ 0,00

---

CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LA NANOELETTRONICA

Italy

Net EU contribution
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

Other funding
€ 0,81

THIRD-PARTY
POLITECNICO DI MILANO

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

Other funding
€ 263 250,00

THIRD-PARTY
ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA

Net EU contribution
€ 212 624 56
€ 212 624,56

Address
Via Zamboni 33
40126 Bologna

Region
Nord-Est > Emilia-Romagna > Bologna

Activity type
Higher or Secondary Education Establishments

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

Other funding
€ 394 874,19

---

SCM GROUP SPA

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

Other funding
€ 443 718,75

---

THIRD-PARTY

CSR CONSORZIO STUDI E RICERCHE SRL

Net EU contribution
€ 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
Other funding
€ 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
Other funding
€ 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

Other funding
€ 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

Other funding
€ 209 950,00

INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE INCORPORATED
Taiwan

Address
Chunhsing Road 195 Section 4
310 Chutung

Activity type
Research Organisations

Other funding
€ 0,00

INTERUNIVERSITAIR MICRO-ELECTRONICA CENTRUM

Belgium

Address
Kapeldreef 75
3001 Leuven

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

Activity type
Research Organisations

Other funding
€ 781 431,62

UAB TERAGLOBUS

Lithuania
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

Other funding
€ 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
Other funding
€ 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
Other funding
€ 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
Other funding
€ 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
HORIZON collaboration network

Other funding
€ 227 825.00

INSTITUT POLYTECHNIQUE DE GRENOBLE

Net EU contribution
€ 118 081.28

Address
Avenue Felix Viallet 46
38031 Grenoble Cedex 1

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

Activity type
Higher or Secondary Education Establishments

Other funding
€ 219 293.82

THIRD-PARTY

UNIVERSITE GRENOBLE ALPES

Net EU contribution
€ 2 340.63

Address
621 Avenue Centrale
38058 Grenoble

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

Activity type
Higher or Secondary Education Establishments

Other funding
€ 219 293.82
HORIZON collaboration network

Other funding
€ 4 346,87

THIRD-PARTY
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
Links
Contact the organisation ➙ Website ➙ Participation in EU R&I programmes ➙ HORIZON collaboration network ➙

Other funding
€ 4 106,31

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)
Links
Contact the organisation ➙ Participation in EU R&I programmes ➙
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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

Other funding
€ 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

Other funding
€ 622 500,00

---

INFORMATION TECHNOLOGY FOR MARKET LEADERSHIP

Greece
Net EU contribution
€ 140 625,00

Address
Katechaki 22
Private for-profit entities (excluding Higher or Secondary Education Establishments)

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

Other funding
€ 328 125,00

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

Austria

Net EU contribution
€ 149 999,94

Inffeldgasse 13/6
8010 Graz

Südösterreich > Steiermark > Graz

Research Organisations

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

Other funding
€ 278 571,31

MURATA ELECTRONICS OY
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

Other funding
€ 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
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Website
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HORIZON collaboration network

Other funding
€ 632 454,06
VRANKEN-POMMERY-MONOPOLE

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
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Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 0,03

THIRD-PARTY

COMPAGNIE VRANKEN

Address
Chateau Des Castaigues
51270 Montmort Lucy

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

Other funding
€ 196 139,97

THIRD-PARTY

VRANKEN-POMMERY VIGNOBLES
VRANKEN-POMMERY VIGNOBLES

France

Net EU contribution

€ 11 415,00

Address

Centre D’activités De La Cote Des N Amp Chapon - Lots N 9 Et 12
51150 Tours Sur Marne

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

Other funding

€ 34 245,00

---

THIRD-PARTY

VPHV

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Net EU contribution

€ 29 056,88

Address

5, Place Du General Gouraud - Batim
51100 Reims

Region

Grand Est > Champagne-Ardenne > Marne

Activity type

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

Links

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Participation in EU R&I programmes
HORIZON collaboration network

Other funding

€ 87 170,62
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

Other funding
€ 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

Other funding
€ 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

Other funding

€ 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)
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)
Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network
Other funding
€ 224 416,87

INTELLECTUAL LABS AS
Norway
Net EU contribution
€ 131 062,50
Address
Dronning Eufemias Gate 16
0191 Oslo
SME
Yes
Region
N
Norge > Oslo og Viken > Oslo

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

Other funding
€ 305 812,50

EC signature date: 13 May 2019
Last update: 27 October 2022
Record number: 223288

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

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