

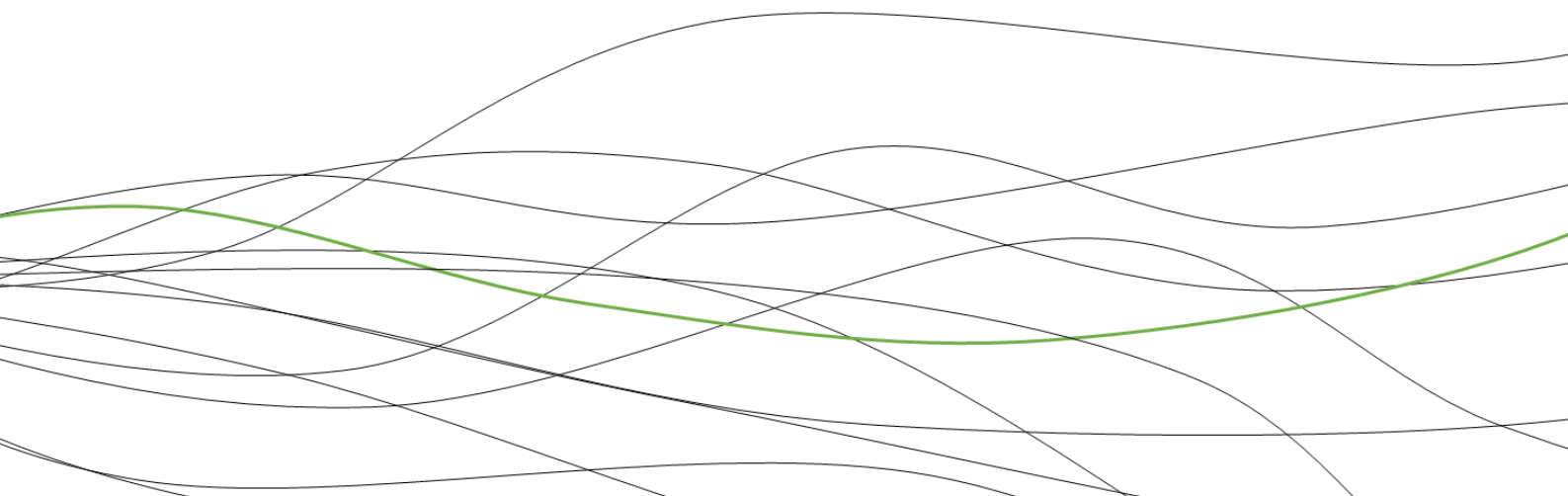
2. September, 2018, Copenhagen



RESEARCH AND INNOVATION BUREAU

UPDATE

**FRONTRUNNERS IN
HORIZON 2020
ARTIFICIAL INTELLIGENCE**



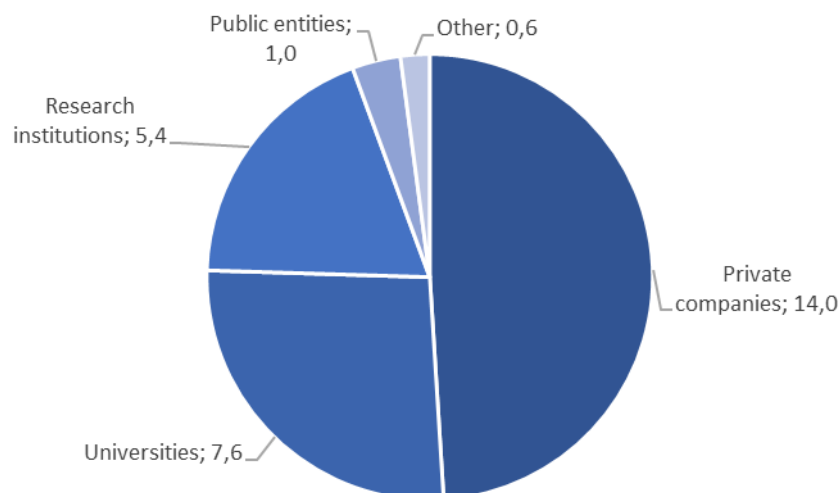
Frontrunners in Horizon 2020 artificial intelligence

Grøn/Bruun has assessed the funding provided to technological development within the fields of artificial intelligence in Horizon 2020.¹ A total of 28 projects was found with a total EU contribution of EUR 28,6 million. The distribution is as follows:

- German institutions are the most successful in obtaining funding for artificial intelligence projects with 16% of the total funding.
- The German institution Forschungszentrum Jülich GmbH is the most successful institution with total funding of EUR 2,5 million.
- The largest part of the funding is allocated to private companies that have received EUR 14 million or 49% of the funding.
- A total of 70 organisations have been funded in 28 projects so far.

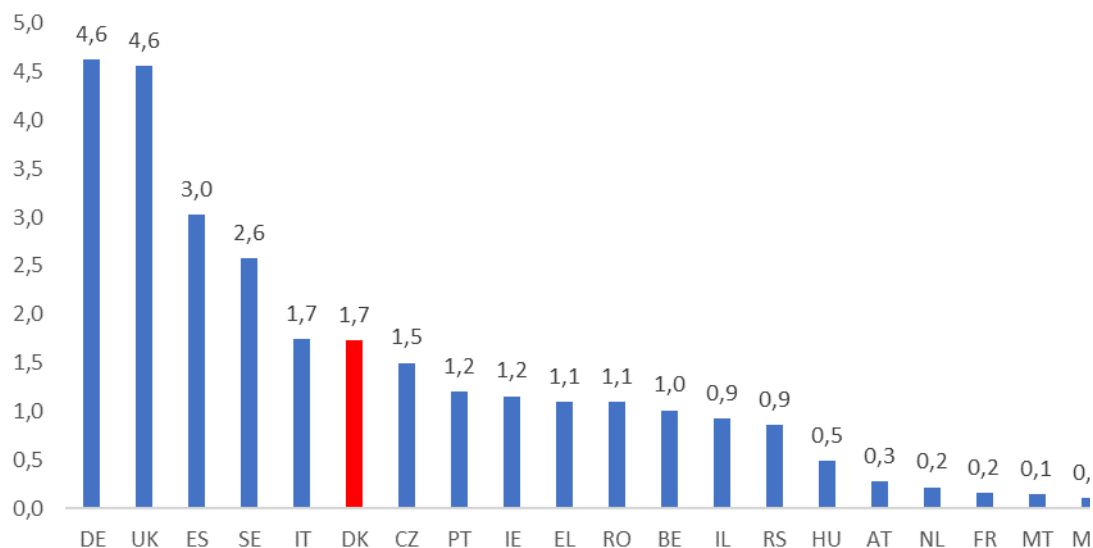
¹ This analysis is based on data from CORDIS and the European Open Data Portal on 2-10-2018. Search criteria: project title including “artificial intelligence”.

Figure 1: Funding to artificial intelligence projects, per type of institution (EUR mill.)



Source: Cordis and European Open Data Portal, 2-10-2018

Figure 2: Funding to artificial intelligence projects, per country (EUR mill.)



Source: Cordis and European Open Data Portal, 2-10-2018

Tabel 1: Funding to artificial intelligence projects, per organisation (ranked by funding)

Rank	Name	Projects	EU contribution (1000. EUR)	Country
1	FORSCHUNGSZENTRUM JULICH GMBH	1	2.499	DE
2	STARCOUNTER AB	1	2.186	SE
3	COBIRO APS	1	1.730	DK
4	UNIVERSITY COLLEGE LONDON	1	1.500	UK
5	CESKE VYSOKE UCENI TECHNICKE V PRAZE	1	1.500	CZ
6	MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN EV	1	1.450	DE
7	SADAKO TECHNOLOGIES SL	1	1.260	ES
8	STRA LDA	1	1.100	PT
9	SIVECO ROMANIA SA	1	940	RO
10	ISTRAZIVACKO-RAZVOJNI INSTITUT RT-RK DOO ZA SISTEME ZASNOVANE NA RACUNARIMA NOVI SAD	1	863	RS
11	ARM LIMITED	1	815	UK
12	INFORMATION CATALYST FOR ENTERPRISE LTD	1	688	UK
13	THE UNIVERSITY OF EDINBURGH	1	681	UK
14	USATGES BCN 21 SL	1	621	ES
15	THE PROVOST, FELLOWS, FOUNDATION SCHOLARS & THE OTHER MEMBERS OF BOARD OF THE COLLEGE OF THE HOLY & UNDIVIDED TRINITY OF QUEEN ELIZABETH NEAR DUBLIN	1	609	IE
16	ENGINEERING - INGEGNERIA INFORMATICA SPA	1	515	IT
17	LIVE TECH SRL	1	491	IT
18	KATHOLIEKE UNIVERSITEIT LEUVEN	1	433	BE
19	INSTITUTE OF COMMUNICATION AND COM- PUTER SYSTEMS	1	404	EL
20	SINDICE LIMITED	1	399	IE
21	ETHNIKO KENTRO EREVNAS KAI TECHNOLOGI- KIS ANAPTYXIS	1	396	EL
22	BLEKINGE TEKNISKA HOGSKOLA	1	394	SE
23	ZF FRIEDRICHSHAFEN AG	1	366	DE
24	DE VLAAMSE RADIO EN TELEVISIEOMROEPOR- GANISATIE NV	1	358	BE
25	INTERDISCIPLINARY CENTER (IDC) HERZLIYA	1	340	IL
26	KLINIKUM RECHTS DER ISAR DER TECHNI- SCHEN UNIVERSITAT MUNCHEN	1	310	DE
27	EOTVOS LORAND TUDOMANYEGYETEM	1	298	HU
28	UNIVERSIDAD DE CASTILLA - LA MANCHA	1	296	ES
29	INTU-VIEW LTD	1	293	IL
30	CITY UNIVERSITY OF LONDON	1	292	UK
31	MAYOR'S OFFICE FOR POLICING AND CRIME	1	291	UK
32	SYNYO GmbH	1	281	AT
33	SYSTMATA YPOLOGISTIKIS ORASHS IRIDA LABS AE	1	250	EL
34	FUNDACION CIUDADANA CIVIO	1	246	ES
35	BIRMINGHAM CITY UNIVERSITY	1	243	UK
36	MINISTRY OF PUBLIC SECURITY	1	240	IL
37	AGENZIA ANSA - AGENZIA NAZIONALE STAMPA ASSOCIATA - SOCIETA COOPERATIVA	1	238	IT

38	UNIVERSIDAD POLITECNICA DE MADRID	1	238	ES
39	STICHTING NEDERLANDSE WETENSCHAPPELIJK ONDERZOEK INSTITUTEN	1	219	NL
40	MINISTERIO DEL INTERIOR	1	213	ES
41	MAVEN SEVEN SOLUTIONS ZARTKORUEN MUKODO RESZVENYTARSASAG	1	195	HU
42	UNIVERSITEIT GENT	1	173	BE
43	SERVICIUL DE PROTECTIE SI PAZA	1	159	RO
44	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	1	158	FR
45	UNIVERSITA DELLA CALABRIA	1	150	IT
46	MALTA INFORMATION TECHNOLOGY LAW ASSOCIATION	1	146	MT
47	CINECA CONSORZIO INTERUNIVERSITARIO	1	129	IT
48	UNIVERSITA DI PISA	1	121	IT
49	SERVICIUL DE PROTECTIE SI PAZA DE STAT	1	105	MD
50	PINTOTECNO SRL	1	50	IT
51	TRUE AI LIMITED	1	50	UK
52	UGENTEC NV	1	50	BE
53	BUSINESS POINT INTELLIGENCE SOLUTIONS LIMITED	1	50	IE
54	3ANTS DEVELOPMENT & STRATEGIES SOCIEDAD LIMITADA	1	50	ES
55	INFERMEDICA SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA	1	50	PL
56	SEQUENTIA BIOTECH SL	1	50	ES
57	VISIONSPACE TECHNOLOGIES LDA	1	50	PT
58	HOLDING ASSESSORIA I LIDERATGE SL	1	50	ES
59	RAYCATCH LTD	1	50	IL
60	DECIPHEX LIMITED	1	50	IE
61	NEUROPSYAI SERVICOS E INVESTIGACAOEM NEUROCIENCIAS LDA	1	50	PT
62	TXN SRL	1	50	IT
63	MEASURENCE LIMITED	1	50	IE
64	APOGEE INFORMATION SYSTEMS	1	50	EL
65	SPACE CONSULTING INTERNATIONAL LLC	1	40	US
66	MINISTERE DE L'INTERIEUR	1	0	FR
67	NVISO SA	1	0	CH
68	SCIPROM Sàrl	1	0	CH
69	FACHHOCHSCHULE NORDWESTSCHWEIZ	1	0	CH
70	HAUTE ECOLE SPECIALISEE DE SUISSE OCCIDENTALE	1	0	CH
Total		70	28.609	

Source: Cordis and European Open Data Portal, 2-10-2018

Tabel 2: Artificial intelligence projects

Nr	Name	Acronym	Teaser	ID
1	Smart Manufacturing Platform for Industrial Part Production through Artificial Intelligence, Big Data & Robotics	Brained-Factory	Based on a Big Data & Artificial Intelligence environment where all data are monitored and implemented continuously, BrainedFactory is a Smart Factory platform integrating the Industry 4.0 and digital transformation to streamline and improve the whole process. It provides...	816098
2	Artificial Intelligence for Air Quality	IntelliAQ	The IntelliAQ project will develop novel approaches for the analysis and synthesis of global air quality data based on deep neural networks. The foundation of this project is the world's largest collection of surface air quality measurements, which was recently assembled by...	787576
3	Artificial Intelligence Data Analysis	AIDA	AIDA brings a transformational innovation to the analysis of heliophysics data in four steps. First, AIDA will develop a new open source software called AIDApp written in Python (a free language) and capable of collecting, combining and correlating data from different space...	776262
4	Biased Artificial Intelligence: Openness, innovation and the remaking of mental health	Biased AI	Following trends to design Artificial Intelligence (AI) for Good, (a plea to develop AI in ways addressing pressing problems that face humanity), the focal question we will address is: What is the proper combination of open and proprietary elements in AI innovation in the...	794604
5	FAKE News discovery and propagation from big Data ANALYSIS and artificial intelligence Operations	FAN-DANGO	Fake News are now a hot issue in Europe as well as worldwide, particularly referred to Political and Social Challenges that reflect in business as well as in industry. Europe is lacking of a systematic knowledge and data transfer across organizations to address the aggressive...	780355
6	PATHOLYTIX: Using Artificial Intelligence to Transform Clinical Diagnostic Pathology	PATHOLYTIX-GI	Routine diagnosis on biopsies and tissues is performed by expert pathologists. However, the pathology sector faces a major crisis, due to soaring numbers of biopsies for diagnosis, coupled with decreasing numbers of trained pathologists, which is affecting patients. Technology...	791476
7	Artificial Intelligence-based diagnostic system for Solar PV Plants	DeepSolar	Raycatch Ltd. is an Israeli SME that has developed DeepSolar, the first complete automated solar diagnostics tool in the market that provides predictive optimization, quantifiable insights and pinpointed actions. Current PV plants' monitoring systems can detect a series of...	790316
8	Artificial Intelligence for early and accurate neuropsychiatric diagnosis	NeuroPsyCAD	NeuroPsyCAD is a cloud-based reporting service that provides an accurate and early diagnosis of neuropsychiatric disorders. To achieve high accuracies, NeuroPsyCAD statistically compares a brain scan of a patient with a normative, human, and population representative database...	790903
9	In-Memory Computing and Artificial Intelligence Platform for Building Next Generation Enterprise Software	Starcouter	Gartner predicts that in 5 years there will be 10 times more enterprise software applications (bizapps) than today. 75% of these new bizapps will be built, not bought from the shelf. This confirms huge demand for developing new software. At the same time the cost of IT has...	784399
10	Probabilistic Automated Numerical Analysis in Machine learning and Artificial intelligence	PANAMA	Numerical tasks - integration, linear algebra, optimization, the solution of differential equations - form the computational basis of machine intelligence. Currently, human designers pick methods for these tasks from toolboxes. The generic algorithms assembled in such...	757275
11	Revolutionary Artificial Intelligence Solution for Managing and Optimising Google AdWords	AdAI	Cobiro is a revolutionary artificial intelligence (AI) platform for managing and optimising Google AdWords. Our solution is an advanced software and AI algorithm that automatically manages the entire process of extracting keywords, AdWords bidding, purchasing, managing and...	784183
12	Deciphering super-Earths using Artificial Intelligence	ExoAI	The discovery of extrasolar planets - i.e. planets orbiting other stars - has fundamentally transformed our understanding of planets, solar systems and our place in the Milky Way. Recent discoveries have shown that planets between 1-2 R are the most abundant in our galaxy, so...	758892
13	An advanced online anti-fraud software equipped with deep learning Artificial Intelligence that can face and detect, current fraudulent techniques and their continued evolution in a cost effective manner	UNFRAUD	"The impact of cybercrime is a growing concern in a society that increasingly interacts online. In the EU the cost of cybercrime has reached €871 billion a year and fraudulent card transactions amounted to €1.27 billion. The high number of online frauds coupled with the low...	775707
14	Commercialisation of TRACS, An Artificial Intelligence Inspired, Text	TRACS	True AI Ltd is an SME operating within the field of Artificial Intelligence (AI) software. True AI automates text-based customer support (social media, email and web chat), leveraging novel AI techniques. Over €303bn per annum is spent globally on delivering customer service...	782872

	Response Automation system for Customer Support			
15	Artificial Intelligence for Recruitment Europe	AIRE	"The SME has developed significant market intelligence to create a successful proof of concept over the past 36 months. We now possess a tangible working prototype and a world first concept in reshaping the hiring and skills domain. Our rationale is to get market validation...	782921
16	Real-time Early Detection and Alert System for Online Terrorist Content based on Natural Language Processing, Social Network Analysis, Artificial Intelligence and Complex Event Processing	RED-Alert	The RED-Alert project will bring data mining and predictive analytics tools to the next level, developing novel natural language processing (NLP), semantic media analysis (SMA), social network analysis (SNA), Complex Event Processing (CEP) and artificial intelligence (AI)...	740688
17	Enhancing security of digital property rights and citizens' awareness through an innovative anti-piracy framework of digital content based on Machine Learning and Artificial Intelligence	3ants	Digital piracy and counterfeit activity causes incredible economic damages in creative & e-commerce sectors. It jeopardizes the rights of all creative individuals, puts jobs at risks, and undermines new legal business models and distribution platforms. Piracy and...	772665
18	JAM: vehicle predictive maintenance through Artificial Intelligence	JAM	JAM is an IoT solution (hardware & software), capable of reducing operational costs of businesses managing vehicle fleets by targeting the following key needs:- Fuel efficiency: fuel represented, in 2011, 32% of the total cost of fleet operation;- Maintenance costs: lack of...	739305
19	Platform for Open Development of Systems of Artificial Intelligence	Bonseyes	The Bonseyes project aims to develop a platform consisting of a Data Marketplace, Deep Learning Toolbox, and Developer Reference Platforms for organizations wanting to adopt Artificial Intelligence in low power IoT devices ("edge computing"), embedded computing systems, or...	732204
20	Artificial Intelligence for Large-Scale Computer-Assisted Reasoning	AI4REASON	The goal of the AI4REASON project is a breakthrough in what is considered a very hard problem in AI and automation of reasoning, namely the problem of automatically proving theorems in large and complex theories. Such complex formal theories arise in projects aimed at...	649043
21	Extending artificial intelligence revolution in the waste field beyond sorting	RUBSEE	Current WTPs (Waste Treatment Plants) aren't able to recover all the valuable waste they process, indeed more valuable materials are lost and land-filled or incinerated. The reason of this wasteful spending is clear: current methods do not allow an increase in material...	756841
22	Artificial intelligence for automated, standardised interpretation of DNA testing results	FastFinder	UgenTec is an award winning Belgian bio-IT start-up that develops software for automated and standardised analysis of DNA detection tests. Founded in 2014, it is venture backed and as raised a capital of €3.45 million. The company is led by Wouter Uten and Tom Martens, both...	775709
23	Critical urban infrastructure and soft target cyber attack protection. Users and application Behavioural Analysis supported by artificial intelligence to preempt security cyber attacks.	SecTrap	SecTrap™ is a security suite that is built on our novel and proprietary Virtual Machine Behavioural Introspection (VMBI) technology and complements existing software security systems already invested by organisations. SecTrap™ ensures that protected assets are inaccessible...	736395
24	Transport System with Artificial Intelligence for Safety and Fare Evasion	TRAINS-FARE	Our project's main objective is to develop a decentralized, interoperable and flexible system to reduce some operational problems at mass transportation systems and to increase their safety. One of the concerns of Mass Transportation Operators (MTO) worldwide is the significant...	663110
25	Disruptive Artificial Intelligence engine to facilitate rapid low cost development of specialist e-health applications for smart decision making in medical pre-diagnosis	AI-medicare	10-15% of all medical cases in developed countries are misdiagnosed, mainly due to medical practitioners' lack of experience, limited time for diagnosis and rarity of the conditions. Furthermore, there is an increasing global shortage of healthcare workers. WHO recommends at...	762032
26	Artificial Intelligence RNA-seq	AIR	We propose a disruptive ICT concept strictly connected to SMEInst: Open Disruptive Innovation Scheme. In the field of genomics, sequencing technologies have drastically changed in the last few years and the output of complex data generated has outpaced the solutions available...	763158

27	StoreHero: An AI (Artificial Intelligence) Virtual Business Coach for Physical Retailers	Store-Hero	90% of total retail sales are still generated by offline retailers, yet but most physical retailers find it hard to make sense of all the data that is available to them and use that intelligence to drive their decision making and compete with online. They are sinking in data...	744623
28	Bringing Personalized Knowledge to Students in Public Schools Through Artificial Intelligence inELearning	Icarus	In the EU, private and public expenditure per full-time student rose from 5,674 to 6,900, i.e. by almost 22% from 2005 to 2010 whilst PISA results remain largely stable. In order to impact students' learning curve, we need advanced learning tools, i.e. e-learning needs to be...	717540

Source: Cordis and European Open Data Portal, 2-10-2018
