

If you plan to invest in Al, then Poland is a perfect spot. It offers a highly-skilled workforce and a vibrant Al and tech ecosystem. It is for that reason that tech heavyweights have already invested here. It is also the reason why you should do so too.



# Example of companies operating R&D centres in Poland



The text-to-speech technology powering Alexa is developed in Gdańsk



In Gdańsk, Intel runs the largest R&D centre in Europe, specializing in computation technology

## SAMSUNG TOMTOM

In Warsaw, Samsung runs the largest R&D centre outside of Korea and develops NLP In Łódź and Poznań, TomTom develops autonomous vehicle technology



In Warsaw, Nvidia optimizes DeepLearning platforms across the software stack

ERICSSON 🗾



In Kraków and Łódź the company runs the largest R&D operations outside of Sweden In Kraków, Aptiv develops autonomous vehicle technology Ŧ··

DT R&D centre in Warsaw focused on AI for all NatCos ringier axel springer

> RAS is building an AI centre of excellence for the media sector



In Kraków, UBS runs its R&D centre, developing Al and machine learning

And there are over **40 companies** that invested in R&D centres developing AI, big data and software products in Poland. In addition, over **600 foreign companies** opened shared service centres in Poland, employing about **250,000 specialists**. Among those investors, **86 belong to The Fortune 500**.

There are over 200 companies doing AI in Poland. Here is a sample of domestic companies providing Al products.

#### Adaptive Vision Industrial ΑI machine vision implementation Ocodewise AdTech AI implementation 🦴 Fin**Ai** FinTech Sales automation **MEDICALgorithmics** Nethone Remote health Anti-fraud diagnostics (ECG) technology

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Robotics

### SYNELISE

Omnichannel marketing

## Alphamoon





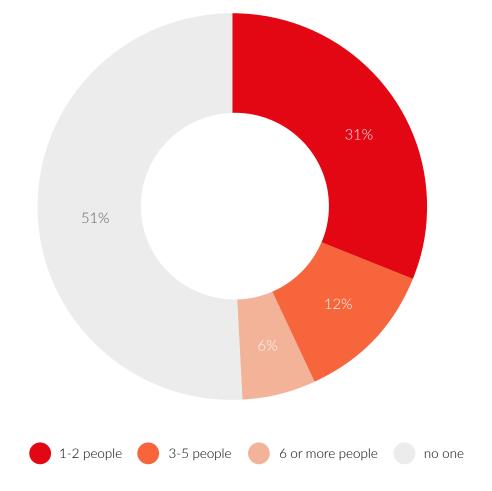
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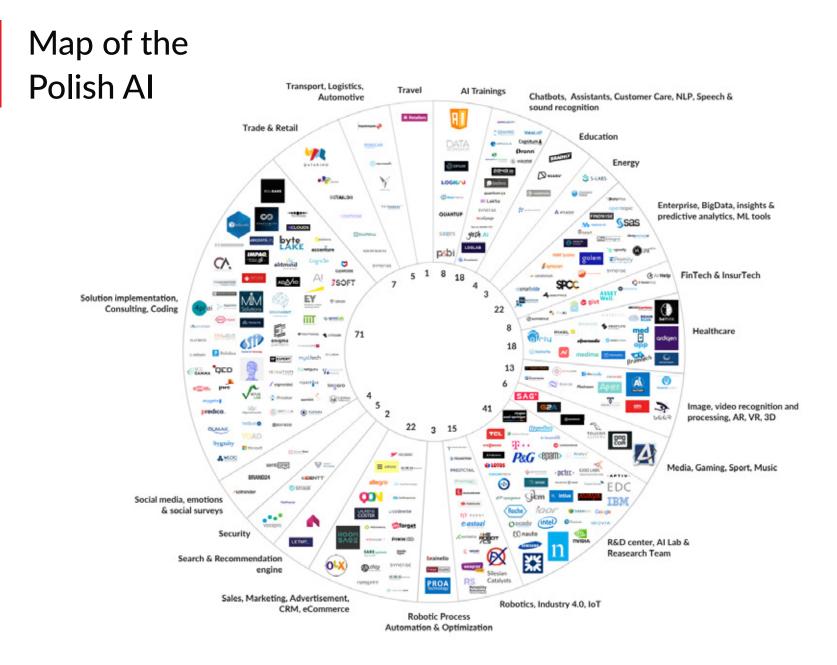
Retargeting technology

## VoiceLab

Natural language processing

Number of PhDs in the AI team – companies hiring people with a scientific degree They draw heavily on collaboration with academic institutions. In fact, half of them hire PhDs:





If you want to know more, do not hesitate to download the Map of the Polish Al.



Financing of Al basic research

## digital poland

Supporting AI initiatives in Poland



Conducting research on Al



Conducting research on Al



Financing of Al implementation



Conducting research on AI and promoting AI in society



Instytut Badań Systemowych Polskiej Akademii Nauk

Conducting research on Al

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Conducting research on AI

There is a set of institutions supporting the development of AI in Poland

# A few interesting facts about Poland



- During the 1930s, Polish mathematicians broke the Enigma code (a research project handed over to Bletchley Park in 1939). They also decrypted Soviet codes in 1919, during The Polish-Soviet war.
- Polish scientists played a major role in The Manhattan Project.
- Each major Polish metropolitan area has a few universities that teach machine learning and big data skills. In the case of Warsaw, there are about a dozen universities.
- Kraków is a global centre of beacon technology two world leaders, Estimote and Kontakt.io, are based in the city.
- Silesia has a vibrant heavy industry sector that includes mining, automotive and train construction, when coupled with an abundant human capital (e.g. 3 technical universities) make it a perfect spot for industrial AI investment.

#### Human resources

Each year about 15,000 computer science and nearly 100,000 STEM students graduate from Polish universities

#### Strong scientific community

- More than 650 PhD or Professors wrote their theses in the field of AI within the last 30 years
- Almost 5,000 researchers published their scientific papers in the field of Al within the last 5 years. Among them, 1,500 are IT specialist



#### Exceptional quality

HackerRank ranks Polish developers 3rd in the world. Polish teams scored 4th both at The International Olympiad in Informatics and Google Code Jam.



#### Cultural fit

All graduates speak English and the culture is similar to other Northern European countries.



#### Know-how

Leading companies run numerous BPO and R&D centres in Poland. This makes green field investment easy.



#### Tax incentives

- Preferential 5% tax rate for income related to Intellectual Property
- The entrepreneur can deduct costs related to R&D even twice
- Lower minimum expenditure for the R&D sector to qualify for CIT exemption
- Long-term tax incentive a taxpayer can set off R&D deductions in the 6 following tax years.

# Why invest in AI in Poland

# Recommendations of AI leaders who have presence in Poland

Poland is one of the most important hubs in Intel AI space. The high-quality ICT education, offered at Polish universities, and the excellent track record of local software engineers makes this possible.

Victor Canseco – Data Center Group, General Manager, **Intel** Poland

The Polish R&D centre is among key Samsung Research facilities and the biggest one in Europe. For many years it was developing advanced AI technology, powering our consumer electronics and telco solutions.

Adam Roś – VP Samsung R&D Institute in Poland

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Amazon's investment in Poland started with the acquisition of Ivona, a text-to-speech software company. Since then, the city of Gdańsk has become one of the major development centres behind Alexa. Afterwards, further R&D investment came, focused among others on the development of cloud-based AI technology.

Mariusz Mielczarek – Head of Public Policy CEE at **Amazon** 

Poland, as Ericsson's second largest Radio R&D centre, plays an important role in developing 5G globally. Ericsson invests in Polish R&D because of high software skill level, experience with telco technology and the central location in Europe. Another reason is the possibility to scale up the workforce with highly competent graduates.

Birgitta Finnander – Head of R&D Center Poland Matrin Mellor – Country Manager **Ericsson** Poland

Ap Pol

Aptiv Technology Centre's 20-year presence in Poland allowed our engineers to gain experience in creating autonomous vehicles all the way from concept to production.

Dr hab. Paweł Skruch – Artificial Intelligence Manager in **Aptiv** Poland Poland has all the predispositions necessary for the development of advanced solutions in the field of AI thanks to an excellent academic background, availability of highly-qualified IT specialists and data scientists, as well as, the openness of Polish companies.

Andreas Maierhofer - CEO T-Mobile Poland



TomTom experts from Łódź and Poznań develop innovative technologies for autonomous vehicles, mobility in smart cities and cloud applications. The use of machine learning and deep neural networks allows for more efficiency, but also handling tasks that cannot be managed by humans.

Kris Kobyliński – Senior Product Manager for Autonomous Driving, **TomTom** 



We selected Poland as our R&D location due to the availability of talented engineers. This is especially important, given the game changers, such as AI and machine learning.

Michał Stępień – **UBS** Country Head in Poland



NVIDIA decided to open a site in Warsaw to take advantage, but also to grow the local talent pool. The local teams optimize Deep Learning platforms across the software stack, from lowlevel changes in CUDA, through data pipeline improvements, up to changes in neural network implementations and topologies, leading to more accurate and faster results.

Piotr Lewalski - Director of Deep Learning, Site Leader, **NVIDIA** Poland

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Ringier Axel Springer has decided to build one of its key global AI and data science centres in Poland. This choice was mainly motivated by the availability of talented engineering specialists.

Aleksander Kutela – VP **RASP** 



TCL has picked Poland for its European research headquarters, recognising that Polish researchers possess a unique combination of great algorithmic and mathematical skills. These skills are crucial for Al projects developed by TCL.

Bartosz Biskupski – Head of TCL Research Europe



We have chosen Poland to establish our Finance Analytics team due to strong capabilities in both Data Science and Data Engineering in the local market. We aim to rapidly advance in process transformation and AI to build the finance function of the future, today.

Andrzej Pacek - Head of NatWest Poland

# digitalpoland

Digital Poland Foundation want to make Poland one of the global digital innovation hubs. With our activities, we are turning digital challenges into opportunities for the Polish economy. We know that without society, Poland's digital transformation is not going to happen, so we bet on education and a series of initiatives promoting digital technologies in Poland. This includes i.a. Digital Festival, Digital Shapers, Al Academy and think tank activity. In all we do, we first and foremost underline the importance of collaboration to build a successful innovation ecosystem.

