GREATER ZURICH AREA



# Greater Zurich: The global Al powerhouse

Where tech giants pioneer AI research and innovation

## Greater Zurich Area: Driving the Al revolution

Switzerland is emerging as a powerful AI hub, based on its excellence in precision mechanics and advanced industries. With world-class universities and the leading position in global innovation rankings, Switzerland, and especially the Greater Zurich Area, is a champion in artificial intelligence.



#### **Excellence in innovation & research**

Switzerland has been the global innovation leader for over a decade. Home to top universities and Al research institutes, the Greater Zurich Area in particular is a leading hub for Al research and development across a variety of fields and use cases.



#### **Thriving Al ecosystem**

The Greater Zurich Area boasts a vibrant tech landscape with top-notch infrastructure and exceptional talent, which has attracted tech giants like Google, Meta, Microsoft, IBM, NVIDIA, and Apple to establish Al labs in the region.



#### **Launchpad for success**

The collaborative environment in Greater Zurich enables dynamic partnerships and high levels of innovative output. The robust network of peer companies and Al-friendly regulation provide the perfect conditions for advancing Al initiatives.

#### Greater Zurich Area makes the top 5 in...



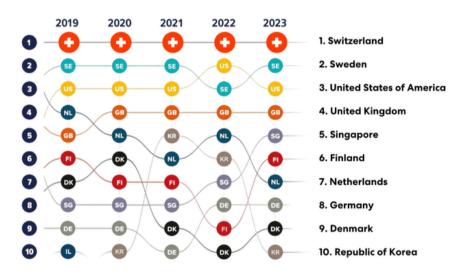
- # Switzerland is the best country for attracting and retaining talent<sup>1</sup>
- #2 Zurich has second highest Al talent density in Europe<sup>2</sup>
- #3 in Al Intensity (Al capacity relative to population)<sup>3</sup>
- #4 in AI research and development<sup>3</sup>
- #5 Switzerland is in the top 5 countries in Europe by Al VC funding<sup>2</sup>
- <sup>1</sup> Global Talent Competitiveness Index 2023, INSEAD
- <sup>2</sup> Al Europe Report 2024, dealroom.co
- <sup>3</sup> Global Al Index 2023, Tortoise Media

## At the forefront of Al innovation

#### The world's leading innovation hub

Switzerland has been ranked #1 in the Global Innovation Index since 2011. This achievement is driven by substantial investments in R&D, the excellence of its universities, and a wealth of skilled professionals. Relative to its population size, Switzerland has generated more unicorns than nearly any other country worldwide and ranks first in patent applications per million inhabitants<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> Patent Index 2023. EPO



Global Innovation Index 2023



KI Sandbox Zurich: Regulatory test environment for AI projects with access to expertise.

Lab42: Tackling global challenges with AI to promote human progress and well-being.

ICAIN (International Computation and Al Network): Advancing the UN SDGs through Al by giving access to supercomputing resources.

GenAl Redteaming Network: Uniting tech companies and research institutions to tackle the safety challenges of generative Al systems.

Al Launchpad: Pan-European accelerator nurturing Al Startups.

### The Swiss Al Initiative: Advancing global Al with Swiss values

The Swiss Al Initiative, involving over 70 professors from Swiss institutes and universities, focuses on developing advanced, large-scale Al applications for societal benefit. The initiative leverages the new Alps supercomputer, one of the world's most powerful Al research infrastructures, to develop industry-specific Al models and explore Al ethics, security, and human-Al interaction.

Accessible to researchers in Switzerland and internationally, it offers promising new avenues for Al research and development.

www.swiss-ai.org

<sup>&</sup>lt;sup>1</sup> Global Innovation Index 2023, WIPO

## Top universities and institutes conduct Al research with global impact

The Greater Zurich Area is home to some of the world's top universities in AI: ETH Zurich, IDSIA, University of Zurich, and ZHAW are at the forefront of AI research across various domains - from foundational AI principles to advanced machine learning and robotics applications.

## ETH Zurich ranks first in Europe for AI research and innovation based on the number of AI patents.

The 2023 European Deep Tech Report by dealroom.co



### ETH Zurich named best university in Europe

(QS World University Ranking: Europe 2025)



ALPS Supercomputer at CSCS. Image: Keystone



IDSIA: The birthplace of DeepMind. Many of the technologies behind the company later acquired by Google were developed here.

Image: Tocchetti

### ETH AI Center: Breeding ground for tomorrow's AI

As ETH Zurich's central hub for artificial intelligence, the ETH Al Center fosters research excellence, industry innovation, and Al entrepreneurship to promote the development of trustworthy, accessible, and inclusive Al systems.

The Al Center holds research partnerships with many of the leading Al companies in Greater Zurich, such as Meta, Google, Magic Leap, and IBM.

ai.ethz.ch



Image: Universitätsklinik Balgrist | Daniel Hager

#### Al meets MedTech

The Operating Room X (OR-X) at Balgrist University Hospital is an open-access center for advanced surgical research and training. It combines a realistic surgical environment with cutting-edge technology like robotics, digital twins, and AR, all relying on artificial intelligence.

or-x.ch

## A leading hub for Al talent

Switzerland and the Greater Zurich Area have continuously led global talent rankings for Al talent density. The Greater Zurich Area is a hub for deeptech talent, especially in the Al sector.

#2

Zurich ranks 2nd in Europe for Al engineer density Zurich ranks 3rd in Europe for the number of Al engineers<sup>1</sup> and 2nd for Al engineer density<sup>2</sup>, significantly surpassing the US and China in per capita Al expertise among software engineers.

<sup>1</sup> Seguoia Atlas, 2023

<sup>2</sup> Al Europe Report 2024, dealroom.co

## Greater Zurich's talent hub attracts big tech for cutting-edge R&D

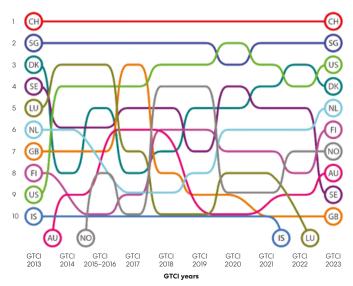
Switzerland is recognized for its deep talent pool, particularly in tech. Almost 6% of its employment base are ICT specialists, 1.5 times the European average<sup>1</sup>.

<sup>1</sup> Eurostat, 2022

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7 out of 10 globally leading Al companies<sup>1</sup> are located in Greater Zurich: Microsoft, Alphabet, Nvidia, Meta, IBM, Adobe, and Palantir

<sup>1</sup> U.S. News, 2024



#### Global Talent Competitiveness Index 2023, INSEAD

#### Global Talent Competitiveness Index: Switzerland leads since over a decade

The world-class universities and research institutions in the Greater Zurich Area not only attract brilliant minds from all over the world but also produce a significant amount of highly-skilled talent, making the region a hotspot for Al innovation.

Switzerland also offers a high quality of life and excellent working conditions, which play a crucial role in attracting and retaining talent, ensuring that top professionals choose to stay here and continue to contribute to the local AI ecosystem.

## Where big tech builds its Al labs

The Greater Zurich Area has emerged as a global hub for pioneering Al research, attracting numerous international tech giants to establish their operations in Switzerland. The City of Zurich in particular is home to numerous big tech companies that are closely clustered, creating a walkable and interconnected Al ecosystem.



#### Google

Google's Zurich office, the largest research hub outside of the US with over 5,000 employees, focuses on advanced Al solutions across various domains like Google Maps, Search, YouTube, and cybersecurity.



#### NVIDIA

Located in Zurich since 2008, the tech giant runs a R&D hub with over 200 employees to further develop its software and has aquired several ETH-spin-offs since establishing in Zurich.



#### **Apple Vision Lab**

Apple is operating the "Zurich Vision Lab", focusing on Al research in computer vision, machine learning, robotics, and autonomous systems. This lab is expected to significantly influence future Apple products, including the rumored Apple Car, AR/VR headset, and enhancements to Siri.



TUTE ETH AI CENTER

Swiss Al Tower

Google FETH Zurich

Magic Leap |



#### **IBM Research Lab**

Established in 1956, IBM's Zurich Lab is a pivotal Al research center, working on various Al advancements. IBM partners with Swiss giant ABB to develop industrial Al solutions using IBM's Watson supercomputer.



IBM

10km / 06. miles



#### **DisneyResearch|Studios**

In Zurich, Disney pioneers scientific advancements in visual computing, machine learning, and Al to enhance the technical and creative filmmaking process. Complementing their expertise is a close academic partnership with ETH Zurich.



#### Meta

Meta's Zurich team researches advanced technologies that underpin current and future AR/VR products. The research lab focuses on mixed reality and humanmachine interaction, which is essential for the development of the metaverse.



#### **Microsoft**

Led by ETH Professor Marc Pollefeys, the Mixed Reality & Al Lab focuses on mixed reality, using computer vision to map environments and assist users in performing tasks.



#### **The AI Institute of Boston Dynamics**

Opening in 2024, the Al Institue in Zurich targets critical Al problems in robotics, collaborating with ETH Zurich to advance the engineering and science of intelligent machines.



#### Sony Al Zurich

The Sony Al Zurich office aims to accelerate Al research and enhance creativity, especially in the entertainment sector.



"Switzerland can rival the best US universities in research papers, salaries, and research facilities."

#### Yann LeCun

VP & Chief Al Scientist at Meta



## A launchpad for success

The Greater Zurich Area is a prime location for Al companies, combining Switzerland's political and economic stability, a collaborative ecosystem, and advanced digital infrastructure to support growth and innovation.



### Stable political and economic environment

Switzerland's stability makes it an ideal environment for international companies to thrive. The trustworthy governance and legal certainty significantly reduce business risks. Moreover, companies benefit from unbureaucratic government support and direct access to officials.



#### **Collaborative ecosystem**

The AI ecosystem in Greater Zurich thrives on collaboration, creating a highly synergistic environment where academia, industry, and startups all work together. This collaborative culture fosters innovation and enables AI use across a wide range of sectors, such as robotics, life sciences, and blockchain.



#### **Advanced infrastructure**

The Greater Zurich Area boasts an advanced digital infrastructure with high-performance computing resources like the Swiss National Supercomputing Center, numerous data centers, and blockchain integration. This robust setup not only puts Zurich at #1 in the Smart City Index, but ensures the successful embedding and scaling of AI technologies.

Is Greater Zurich on your expansion radar?
Access our tailored and free support services!

#### Al regulation in Switzerland: Pragmatic and tech-neutral

#### **Data privacy laws**

- Stringent Swiss data privacy laws offer high security and quality.
- Swiss laws align with EU standards while maintaining a more pragmatic approach to foster innovation without the overly restrictive measures seen in other regions.

#### Innovation-friendly regulatory framework

- ✓ Progressive regulation allows for innovation.
- Authorities are pragmatic and accessible, ensuring smooth interactions with businesses.

#### **Tech neutral regulation**

- Swiss laws are designed in a technologyneutral manner, offering clear regulation for high legal certainty and international flexibility.
- Focus on updating existing laws to accommodate new advancements, ensuring that Al companies are not burdened by outdated regulations.

#### **Future regulatory updates**

Switzerland plans to finalize an AI regulatory proposal by 2025, setting guidelines for AI use across the nation.

## Looking to join Greater Zurich's Al ecosystem? <u>Get in touch!</u>

Greater Zurich Area Ltd. is the official investment promotion of Zurich and surrounding Swiss cantons. We help you grow your business in Switzerland - all free of charge.



Introduction to key contacts in industry, academia, and government agencies.



Facilitating contact to potential research partners at universities, and research institutes.



Support in location evaluation, introduction to service providers, and advice on regulations.



#### **Contact us today**

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greaterzuricharea.com

