AI for Society

Idiap is a research institute of national importance active in the field of artificial intelligence that engages in fundamental research, education, and technology transfer in artificial intelligence, machine learning and signal processing.

Idiap at a glance

Over the last five years:

Research

- **686** scientific publications
- **over 29** millions CHF of externally funded projects
- **3150** dataset acesses granted

Innovation

- **84** licenses
- **206** software disclosures
- **122** open access software release

Education

- ~ **45** PhD students trained per year
- **31** courses from Bachelor to PhD
- **over 100** student projects supervised

4 Research Programs

Human-AI Teaming

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Sustainable & Resilient Societies

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

AI for Life

3 GOOD HEALTH AND WELL-BEING

10 REDUCED INEQUALITIES

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AI for Everyone

4 QUALITY EDUCATION

5 GENDER EQUALITY

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Idiap Research Programs are driven by global challenges and Switzerland's societal and industrial needs. Aiming at high impact, and aligned by the UN Sustainable Development Goals, they are addressed by the Institute's multidisciplinary expertise.

Human—AI Teaming

This research program capitalizes on the well-established expertise at Idiap on multimodal interaction. It leverages Idiap's unique ability to undertake in-depth multidisciplinary research across verbal and nonverbal communication, language processing, perceptual and cognitive systems, and human—robot interaction.

The aim of the program is to expand human capabilities in several fields (creativity, cognitive limitations, collaboration, knowledge). This research aims to improve machines' sensing and understanding of human activities, improve information access (e.g., through chatbots serving as on-demand domain experts), use human feedback for improving learning systems, and use robots to assist humans in everyday tasks at work and at home.

Sustainable & Resilient Societies

Humanity is facing unprecedented challenges driven by climate change. As we cannot only count on technological solutions, people must be incentivized to contribute to more resilient and sustainable societies.
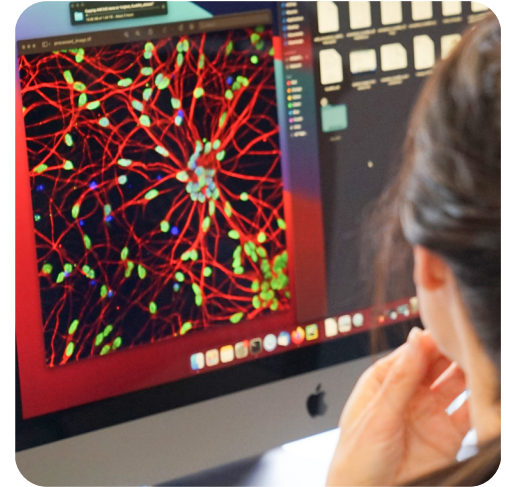
Designing and adapting artificial intelligence models to include people can help us to take on these challenges. With their multidisciplinary expertise, Idiap researchers can help to include this human dimension. Their work contributes to tackling misinformation while reducing energy costs, and to identifying relevant social trends while helping us to understand our environment.

AI for Life

At Idiap, we aim to gain a deeper understanding of complex diseases and develop novel therapeutic approaches by leveraging advanced learning and inference paradigms that allow us to integrate diverse, longitudinal, interventional data and prior scientific and expert knowledge.

We embrace the complexity of individuals' health and personal care and a broad range of multimodal health and biological data.

We are dedicated to transparently and intelligibly enhancing health outcomes while ensuring democratic access to solutions.
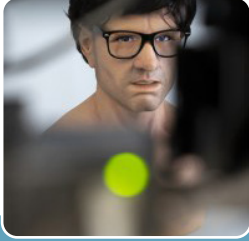

AI for Everyone

To support individuals and communities outside mainstream Western societies, governments, NGOs, and businesses often use tools that were not designed with these users in mind. This needs to change.

Artificial intelligence should serve everyone, equitably. To achieve this, people—especially those whose voices are often not heard—need to be at the center of the design and deployment of AI systems. Through the development of participatory, trustworthy, and fair technology, research at Idiap empowers communities of users and fosters democratic, collective decision-making. The impact of our work is broad, ranging from citizen science initiatives to projects where the responsible use of AI can truly benefit communities.

4 Centers

Center for Biometrics Research and Testing

Center for AI Certification

Center for Assistive Robotics

Center for Participatory AI

Idiap's Research Centers bring together the expertise of multiple principal investigators and associated research infrastructure to consolidate a critical mass and density of expertise in key areas of research and development, enabling the delivery of impactful outcomes and attracting collaborators from industry, higher education institutions, and other potential partners.

Industry collaborations

Idiap actively **facilitates technology transfer and innovation**, fostering successful collaborations with the industry and nurturing the creation of impactful tech startups.
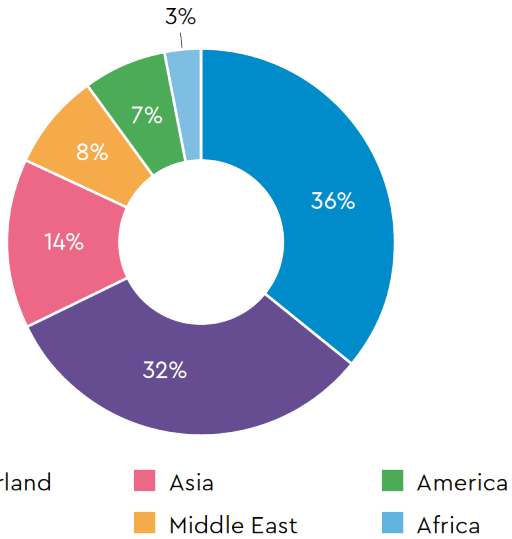
We are passionate about **bringing groundbreaking AI research to life**. Our dedicated technology transfer team collaborates closely with businesses of all sizes—from early startups to established corporations—to research and develop solutions that address their specific needs and challenges.

Idiap's specialized technology transfer team, comprised of **highly skilled research and development engineers**, empowers companies to leverage cutting-edge AI solutions. By developing **customized software tools** and integrating them seamlessly into industry workflows, and by **granting licenses,** they bridge the gap between research and real-world applications, accelerating business innovation.
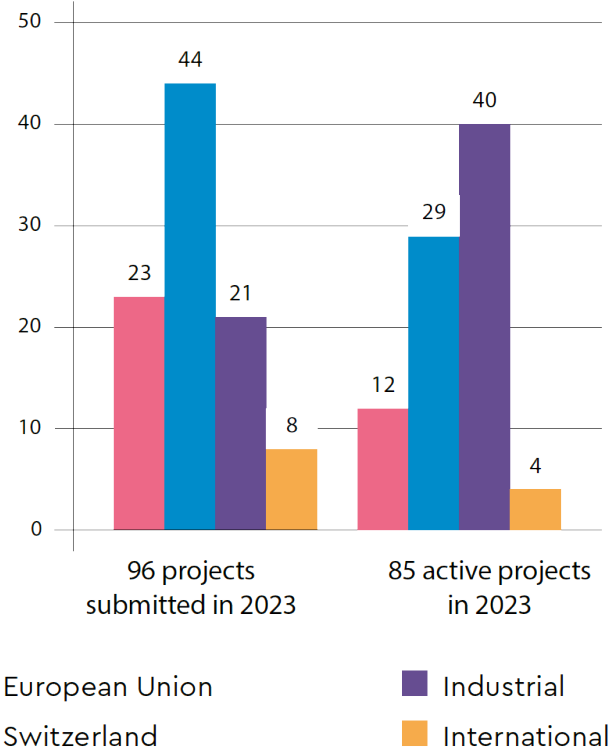
Additionally, **Idiap's incubator**—IdeArk—enhances the Institute's technologies and promotes the creation of new startups by offering workspace, facilitating financing, and providing mentorship to the founders.

2023 Overview

42 nationalities

- Switzerland — 36%
- Europe — 32%
- Asia — 14%
- Middle East — 8%
- America — 7%
- Africa — 3%

Number of research projects

96 projects submitted in 2023
- European Union: 23
- Switzerland: 44
- Industrial: 21
- International: 8

85 active projects in 2023
- European Union: 12
- Switzerland: 29
- Industrial: 40
- International: 4

Legend:
- European Union
- Switzerland
- Industrial
- International

Take a look at our Scientifc Report

Contact

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