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ENGLISH

Annual Report 2025

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à la recherche et à l'innovation SEFRI

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Foreword

Message from the President of the Foundation Council


Anne-Laure Couchepin Vouilloz

I am pleased to note that, over the course of an exceptionally intense year, the Institute has continued to demonstrate remarkable resilience and unwavering commitment.

Once again, this year Idiap has demonstrated its scientific excellence through major achievements such as the award of an ERC Advanced grant, distinctions bestowed at leading international conferences, and the success of its researchers in securing competitive funding.

Moreover, the interim Management fully assumed its responsibilities with professionalism and commitment. The team involved ensured operational continuity, preserved strategic momentum, and provided essential support to both researchers and staff. This contribution was instrumental in maintaining the Institute's cohesion and in ensuring the continuation of its activities and its level of excellence.

Idiap thus reaffirms its role as a leading actor in the national and international AI research landscape, alongside schools and universities.

I would like to commend this collective effort, and to warmly congratulate everyone involved for their dedication and contributions.

Message from the interim management team


Christophe Rossa, Joël Dumoulin, Aïda El Faiz et Sébastien Marcel

In June 2025 we assumed the interim leadership of the Institute with a profound sense of responsibility. During this period of transition, our priority has been to ensure the continuity of our activities, to support our teams, and to preserve the quality of the scientific work that sustains Idiap's reputation.

The past year highlights the richness of the contributions of everyone at Idiap: major scientific advances, interdisciplinary projects, partnerships, and numerous achievements essential to the smooth functioning of the Institute.

These outcomes confirm Idiap's position as a major player in artificial intelligence research in Switzerland and internationally.

In the face of the rapid developments in our field, we are convinced that the Institute's strength lies in collaboration, dialogue, and the sharing of knowledge. It is in this spirit that we approach the challenges ahead, with a determination to strengthen our scientific excellence while remaining attentive to our responsibility to serve society.

We thank the Foundation Council for its trust, as well as the Swiss Confederation, the Canton of Valais, and the city of Martigny for their indispensable support. Thanks to them, the Institute can continue to pursue its missions in research, education, and technology transfer.

We also extend our sincere thanks to all Idiap's staff members for their collective commitment. Together, we will continue to uphold Idiap's values and advance its ambitions in an ever-evolving artificial intelligence landscape.

Key figures

264

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Spin-off company

HUMAIN–AI TEAMING

Improving quality of life for people with disabilities

Over one billion people worldwide, around 16 percent of the global population, live with disabilities, with mobility impairment being the leading cause.[1] As accessibility and inclusion become central to discussions at the societal level, assistive robots could improve lives. Their complexity, however, makes adoption difficult, as most systems require sophisticated movements even to achieve simple tasks. This limits their everyday usefulness, preventing many people from benefiting from their obvious potential.

How beneficial would it be for people with mobility impairments to be empowered and to perform daily tasks that would otherwise be impossible without another's help? With this question in mind, research scientist Emmanuel Senft and his team have developed a new robotic system designed to be simple and natural to use.

The goal is that users no longer have to overthink their commands and can instead focus on what they want the robot to do, the system handling the rest.

This system is based on shared control, meaning the user and robot work together. It uses a joystick, similar to the one found on an electric wheelchair, to control the robot as it performs a wide range of tasks, from loading laundry into a washing machine to more creative activities like painting. The system uses advanced motion paths called "canal surfaces" to guide the robot, making its actions smoother and more predictable.

The joystick's inputs are also adjusted dynamically based on where the robot is on its path, giving the user a sense of natural control without the need to understand complex mechanics. To enhance accessibility, the system can incorporate gaming interfaces especially designed for individuals with reduced mobility.

The system was tested with two groups of participants. The first group contained 20 individuals without disabilities aged 25 to 48 and with technical or administrative backgrounds. They tested the system against a baseline version to see how well it worked. The second group consisted of three wheelchair users aged 52 to 61, who explored how the system could meet the needs of people with disabilities.

Compared to other systems, this new approach significantly reduces the effort required from the user, improves task performance, and makes the experience of controlling a robot feel more natural. It also stands out for its versatility, as it supports the user in a wide range of activities ranging from daily chores to creative endeavors.

1. who.int/news-room/fact-sheets/detail/disability-and-health

This study demonstrates the potential of assistive robotics to empower people with disabilities by helping them tackle both practical and creative tasks with greater ease and independence. Future work to explore how to use this system in real homes is planned.

Related resources

Rajapakshe, S. et al. (2025). Giving Sense to Inputs: Toward an Accessible Control Framework for Shared Autonomy. *ACM/IEEE International Conference on Human-Robot Interaction (HRI)*.

SUSTAINABLE AND RESILIENT SOCIETIES

Enabling the cantonal energy transition

In Valais, electricity demand is set to rise as heating systems and mobility are electrified. Yet data on buildings and energy use remains scattered across multiple sources.[1] This fragmentation limits the ability of municipalities and the canton to plan effectively, evaluate scenarios, and coordinate investments. Strengthening this analytical foundation has become crucial to efforts to guide strategic decisions and ensure a resilient energy system.

To address the lack of centralized data on buildings and energy use, senior research scientist Jérôme Kämpf and research associate David Geissbühler developed

a digital platform that simulates building renovations and renewable energy deployment on an urban scale.

The platform combines CitySim, a software for urban energy simulation, and BASOPRA, a tool that optimizes solar energy use across batteries, heat pumps, and electric vehicles.

The OpenBEERS web platform helps visualize and plan energy improvements for the buildings in a neighborhood or city. It works by combining several elements: a specialized database that stores 3D information about the buildings and terrain, publicly available Swiss datasets (including 3D building models, elevation maps, and property records), different scenarios showing how buildings could be upgraded (including by adding insulation, heat pumps, or solar panels) and how climate change might affect the area by 2040–50, a simulation software that calculates energy use and renewable energy production, and, finally, an interactive 3D map on which buildings are color coded according to their energy performance.

In simpler terms, it's like Google Earth meets an energy calculator, and allows you to see how your neighborhood could become more energy-efficient and what impact future climate conditions might have.

The study focused on the municipalities of Sierre and Val de Bagnes, and findings reveal that energy data in Valais is still fragmented, making advanced simulations challenging.

The OpenBEERS project was carried out together with Prof. Jakob Rager, Dr. Alejandro Pena-Bello, and Dr. Lucien Troillet from HES-SO Valais-Wallis.

1. geo.vs.ch/web/energie/connaître-la-politique-énergétique-cantonale

Related resources

Geissbühler, D. et al. (2025). OpenBEERS: A digital platform for urban scale simulation of building energy efficiency. *Journal of Physics: Conference Series*, 3140(4), Article 042013.

Discover the platform

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SUSTAINABLE AND RESILIENT SOCIETIES

Advancing law enforcement capabilities through responsible AI

The responsible integration of artificial intelligence into law enforcement is becoming increasingly important as agencies seek tools that enhance operational effectiveness while fully respecting privacy, data protection, and security requirements.

In this context, Idiap's Speech & Audio Processing Group, led by senior researcher Petr Motlicek, participated in TRACY, a project dedicated to developing advanced analytics that support forensic investigations without compromising regulatory compliance. In particular,

> the study collected diverse sources of metadata to improve the resolution of complex forensic cases.

These sources included camera streams, number plate–recognition systems, and non-content communication data.

A key outcome of the project is the development of a framework that analyzes large-scale communication network logs to identify mobile devices located near key locations at times relevant to an investigation. The framework relies exclusively on encrypted device identifiers and combines spatial, temporal, and behavioral indicators to produce reliable rankings, while preserving individual privacy.

To complement this analytical engine, the team developed the TRACY Canvas, an interactive visualization tool that enables investigators to explore relationships between individuals and examine supporting evidence intuitively. By presenting data-driven insights in a clear and accessible format, the TRACY Canvas helps investigators uncover and interpret complex connections more efficiently.

TRACY outcomes attracted notable recognition at the BITE Awards 2025—a leading Greek event honoring excellence in information technology and digital transformation.

This research, part of the EU-funded Horizon 2020 program, marks a step toward the responsible use of AI in forensic applications, demonstrating that innovation, usability, and strict regulatory compliance can be successfully aligned.

Related resources

Kumar, S. et al. (2025). Performance Evaluation of SLAM-ASR: The Good, the Bad, the Ugly, and the Way Forward. SALMA Workshop, *Proceedings of IEEE International Conference on Acoustics, Speech, and Signal Processing* (ICASSP), Hyderabad, India.

Kumar, S. et al. (2025). Latent Space Factorization in LoRA. 39th *Conference on Neural Information Processing Systems.*

Sanchez ,L., A. et al. (2025). TRACY Canvas: A Criminal Network Visualization Tool. Idiap-RR-03-2025.

Rangappa, P. et al. (2025). Accelerating Criminal Investigations with *TRACY. International Conference on Digital Forensics and Cyber Crime.* Miami, Florida, USA.

Madikeri, S. et al. (2025). Autocrime-open multimodal platform for combating organized crime. *Forensic Science International: Digital Investigation*, 54, 301937.

Discover the platforms

Funded by the European Union

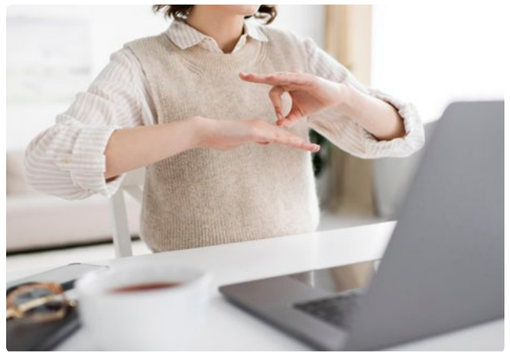
AI FOR LIFE

Pushing the boundaries of sign language learning and assessment

Around 70 million people worldwide are affected by deafness.[1] In Switzerland, an estimated 10,000 people are deaf, defined as profound hearing loss (with very little or no hearing). In addition, approximately 20,000 people in Switzerland regularly use one of the Swiss sign languages (German, French, or Italian Swiss Sign Language).[2]

Over the past nine years, Idiap has been leading research and development on automatic sign language assessment with the aim of developing assistive technology for sign language learning, all via a multi- and interdisciplinary collaboration with HfH Zurich, the University of Zurich, and the University of Surrey (UK).

At the heart of this initiative is Swiss German Sign Language (DSGS), the natural language of the deaf community in German-speaking Switzerland. Despite its cultural and linguistic significance, DSGS remains under-studied and lacks digital resources.



1. un.org/en/observances/sign-languages-day
2. sgb-fss.ch/fr/languesdessignes/etre-sourd/

Under the coordination of senior research scientist Mathew Magimai-Doss from Idiap's Speech & Audio Processing Group, the Swiss National Science Foundation (SNSF) Sinergia project w—which focuses on isolated sign languages—was conceived to bring together researchers from sign language linguistics, sign language assessment, sign language technology, and spoken language technology in order to address the matter. The project did this by developing linguistically annotated datasets, designing a linguistically grounded and explainable sign language processing framework inspired by speech processing, and implementing a sign language assessment demonstrator using a dedicated 3D Kinect sensor to support both learning and evaluation for deaf and hearing learners.

The subsequent SNSF Sinergia project SMILE-II expanded the research to continuous sign language and long-term assessment, and significantly improved accessibility by enabling remote use of the sign language assessment technology developed under SMILE. Learners can now access the system online using a standard webcam (such as a laptop camera), eliminating the need for specialized 3D hardware like Kinect and broadening access in diverse learning contexts.

Mathew Magimai-Doss

In the framework of the Innosuisse Flagship project IICT, the team then went further, developing a self-learning and evaluation platform for the Fédération Suisse des Sourds (SGB-FSS) that allows learners to practice individual signs and be evaluated automatically almost in real time, thus speeding up the learning process. This application, one of the first of its kind, allows sign language learners to assess their own performance on individual signs and receive feedback on various aspects of sign production—a major step toward interactive, autonomous learning.

Looking ahead, this research could have far-reaching applications beyond sign language learning. Similar technology could support sports rehabilitation, speech therapy, early childhood learning, and school programs that introduce sign language, promoting inclusion from a young age.

Related resources

Tornay, S. and Magimai-Doss, M. (2025). Towards Dynamic Skeleton-based Handshape Subunits for Sign Language Assessment. *Proc. of IEEE International Conference on Acoustics, Speech and Signal Processing* (ICASSP).

Tarigopula, N. et al. (2025). Posterior-based analysis of spatio-temporal features for Sign Language Assessment. *IEEE Open Journal of Signal Processing.*

Tarigopula, N.(2025). Advancing Phonology-Based Sign Language Assessment: From Learner to Machine-Generated Videos, PhD Thesis 11178, École polytechnique fédérale de Lausanne (EPFL).

Discover the platforms

Innovation project supported by

Schweizerische Eidgenossenschaft
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Innosuisse – Swiss Innovation Agency

Fonds national suisse

Universität Zürich[UZH]

UNIVERSITY OF SURREY

AI FOR LIFE

Empowering confident movement for people with visual impairments

Despite major advances in technology, people who are blind or visually impaired still face significant challenges when it comes to moving safely and independently outdoors.

This motivated Idiap and Biped.AI, the start-up founded by Idiap PhD student and former Idiap Create Challenge winner Mael Fabien, to join forces and advance research in mobility assistance. At the heart of this collaboration is a simple goal:

> giving people who are blind or visually impaired greater ease, dignity, and confidence as they move through the world.

Biped.AI reimagines mobility support with a lightweight, shoulder-worn device that uses multiple sensors and intuitive audio cues to help users detect obstacles, anticipate the movement of pedestrians and vehicles, and navigate unfamiliar spaces with greater confidence. Leveraging the expertise of Idiap's Activity & Perception Understanding Group, led by Jean-Marc Odobez, and with support from Innosuisse, the partners redesigned the system's perception module using a new deep-learning architecture capable of interpreting the set of multimodal images captured by the device. This architecture provides a richer 3D understanding of the environment and now forms the technological core of "Biped 2.0."

To achieve this, the partners produced an annotated scene dataset captured using Biped's device, focusing on key elements relevant to pedestrian navigation, and created another dataset to explore hands-free interaction with Biped's device through gesture recognition. In parallel, they developed a real-time system that combines images from three sensors to create a wide view and that can understand the scene and recognize hand gestures. These advances led to major improvements in obstacle detection, scene understanding, and user interaction.

Real-world testing played an important role throughout the project. Early outdoor trials evaluated the first version of the system on everyday obstacles such as trees and benches, combining obstacle-detection benchmarks with satisfaction surveys. Later, 15 users tested the updated system, with positive results: satisfaction with obstacle detection improved, reflecting noticeable gains in comfort and reliability. Additional field tests with current users confirmed the benefits of panoramic scene alignment for improved 3D obstacle detection and of a more detailed understanding of the environment.

Jean-Marc Odobez

These results show that by combining the expertise of Biped.AI and Idiap,

> AI can be applied to address real needs: producing a more capable assistive device, increasing user confidence, and supporting safer, independent mobility for people who are blind or visually impaired.

Related resources

Villamizar, M. et al. (2024). Investigating semantic segmentation models to assist visually impaired people. *Proceedings of the European Conference on Computer Vision – Workshops (ECCV 2024 Workshops)*. Milan, Italy.

Innovation project supported by

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Innosuisse – Swiss Innovation Agency

biped.ai

AI FOR EVERYONE

Studying artworks through biometrics

The study of art history has long relied on meticulous visual analysis, archival research, and comparative interpretation. As the volume of cultural heritage data continues to grow, and as many historical works remain fragmentary or incompletely documented, artificial intelligence is opening new avenues for reconstructing and understanding the past.

Sébastien Marcel, senior research scientist at Idiap and Professor at the University of Lausanne (UNIL), together with colleagues from the University of Oxford, UNIL, and the Musée d'art et d'histoire (MAH) in Geneva, is addressing a century-old unresolved question: the identities of subjects in the MAH's historical portrait collection, many of which remain unknown. A focal point of the project is a series of portraits attributed to Jean-Étienne Liotard and thought to depict Marie Antoinette, Queen of France, and her sister, Maria Carolina, Queen of Naples.

At the heart of the study lies heterogeneous face recognition, a branch of biometrics that enables facial comparison across different visual modalities such as photographs, drawings, engravings, or painted portraits. Originally developed to address security challenges such as matching faces across surveillance cameras, identity documents, or sensors operating under varying conditions, here the technology is being repurposed to bridge centuries of visual representation.

From a biometric perspective, the challenge is formidable: historical portraits differ radically from modern photographs in terms of style, texture, pose, lighting, and artistic interpretation. To address this conundrum, the Biometrics Security & Privacy Group at Idiap adapted state-of-the-art face recognition models normally trained on contemporary photographic data so that they could extract identity-related facial features from painted artworks.

This model adaptation approach builds directly on long-standing research from the Group, in which questions of robustness, generalization, and responsible use of biometric technologies have been central for years.

Rather than treating art as a purely visual artifact, the technique, named ArtFace, approaches portraits as biometric signals shaped by artistic conventions. By carefully fine-tuning advanced AI models to respect these differences, the system can compare portraits across time, medium, and style, revealing similarities that would otherwise remain hidden. Importantly,

this work demonstrates how biometric technologies, often associated with security, can be redirected toward cultural, historical, and societal applications, opening up new, ethically grounded uses for AI.

This interdisciplinary collaboration illustrates how

AI can contribute meaningfully to society by generating new knowledge and enriching the humanities.

It also highlights the Institute's ability to translate cutting-edge research in biometric security and privacy into innovative tools that connect technology, history, and culture in unexpected and impactful ways.

MAH Musée d'art et d'histoire, Ville de Genève. Dépôt de la Confédération suisse, Office fédéral de la culture, Fondation Gottfried Keller, Berne, 1947

Related resources

Poh, F. et al. (2025). ArtFace: Towards historical portrait face identification via model adaptation. *ICCV Workshop ArtMetrics.*

AI FOR EVERYONE

Bridging community and technology through participatory design

Cities today face complex challenges that strain urban life, including budget constraints, rapid technological shifts, and declining trust in local authorities. Involving citizens in designing innovations that address these challenges is essential if we are to create solutions that are both effective and widely supported.

Led by Prof. Daniel Gatica-Perez, the Social Computing Group at Idiap with the participation of Ravinitesh Annarepuddy (PhD) and Alessandro Fornaroli (intern) has worked closely with the cities of Turin (Italy) and Riga (Latvia) to codevelop civic tools through a participatory approach, bringing together civil society, municipal services, and law enforcement.

By placing stakeholders at the center of the design process, these tools were shaped collaboratively to respond to local needs while integrating social and technological innovation.

In Turin, the team codeveloped "Sbocciamo Torino" (in English: "Let's 'blossom' Turin"), a data-supported platform fostering multi-stakeholder collaboration to prevent juvenile delinquency. The project united neighborhood police, youth groups, social services, and NGOs in a participatory governance network. By prioritizing inclusive dialogue, the initiative enabled the co-creation of more equitable and responsive policies. It also introduced, for the first time, a dashboard combining open and stakeholder data on Turin's digital infrastructure.

In Riga, the team codeveloped "Par drošu Rīgu" (in English: "For a safer Riga"), a tool that supports district policing by combining police records with citizen feedback to guide more effective, community-focused strategies. The project connected law enforcement with residents, collecting feedback on safety, neighborhood ties, and trust in the police. NGOs, municipal services, and patrol officers assisted in the data collection. This participatory approach enhanced transparency, improved the alignment of policing with community needs, and established a new collaboration framework between NGOs, municipal services, and police to ensure safer public spaces.

Daniel Gatica-Perez

At the core of these initiatives is the principle that civic tools are most effective when co-created with stakeholders. This collaborative research produced the Evidence-Informed Participatory Governance Model, a framework for engaging communities in decision-making, and the Generative AI Literacy Competency Model, designed to help the public navigate the evolving AI landscape.

Idiap's work highlights that

technology and data alone do not solve urban challenges. Real impact comes from designing tools with people at their center—tools that empower rather than exclude the communities they serve.

Related resources

Annapureddy, R. et al. (2025). Co-designing with multiple stakeholders and datasets: A community-centered process to understand youth deviance in the Italian city of Turin. *Proceedings of the International Conference on Communities and Technologies (C&T)*. Siegen, Germany.

Annapureddy, R. et al. (2025). Generative AI literacy: Twelve defining competencies. *ACM Digital Government: Research and Practice* (DGOV), 6(1).

Funded by the European Union

Alumni spotlight

A conversation with Samy Bengio

At the beginning of 2025, Idiap launched its Distinguished Lectures series, inviting leading figures to present talks on selected scientific and interdisciplinary topics to both Idiap personnel and the wider public. The series was inaugurated by Samy Bengio, Idiap alumnus and Senior Director of AI and Machine Learning Research at Apple and Adjunct Professor at EPFL. Prior to his lecture, we had the opportunity to engage him in conversation, gaining insights into his work and perspectives on the future of AI.

How are you, and how does it feel to be back?

Well, I never really think of it as "coming back." I'm always moving forward. Things have changed—Idiap is not what it was, Switzerland has changed, I've changed, the world has changed. I'm still based in California, but now I'm also working as a faculty professor at EPFL. It's not about returning; it's about continuing.

Can you share a bit of your story and how you arrived at Idiap?

So I was at Idiap from 1999 to 2007—my first real job after one or two postdocs in Canada. I wanted to be close to my girlfriend, who had moved to Switzerland, and I knew Hervé [the former Director], who offered me a position at Idiap. I accepted, and that's how it happened.

What do you treasure most from your time at Idiap?

Definitely the people. I learned a lot about my own values and approach to research here, which I've carried with me throughout my career at Google and Apple. Beyond the environment—the mountains, Switzerland—the relationships and memories I built with colleagues are what I cherish the most.

Shifting to AI, what do you think will be the most positive impact AI will have on society in the next three to five years?

AI will have a tremendous impact on society, both positive and negative. Healthcare will likely see the most dramatic improvement—AI can help monitor health, assist in diagnostics, and improve outcomes. Education and other fields will also benefit. But there's a risk of bias, because AI depends on data, which often comes from specific parts of the world. We must ensure that the benefits reach everyone, not just some groups.

What are the most pressing ethical challenges for AI?

The main challenge is bias. Most AI research teams lack diversity, and as a result AI tools can favor certain populations over others. To mitigate this, we need diverse teams who can highlight overlooked perspectives. Ethical AI is about building systems that are inclusive, respectful of the data providers, and beneficial to everyone—not just profitable or efficient for a subset of users.

Some people worry AI will replace or harm people. What's your take on that?

Most researchers aim to understand the world, not harm it. Negative impacts usually happen unintentionally, because we may not know the circumstances of people in other parts of the world. For example, a machine translation tool might work well for French or English but fail for Zulu. The ethical question is ensuring AI is built with awareness and inclusivity.

How can we ensure everyone benefits from AI?

Primarily by building diverse teams and maintaining awareness of global perspectives. Most of the AI field is dominated by white males from Western countries, which makes it challenging—but necessary—to include different voices. This helps ensure that the AI we build serves everyone.

Which economic sectors will benefit most from AI?

Healthcare again stands out, thanks to the rise of connected devices—phones, watches, earphones—that monitor personal health. AI can alert users to important health indicators. Other sectors, including defense, will also benefit, though sometimes controversially.

What about AI in the creative sector?

AI in creativity has evolved significantly. While some worry it just copies human work, it can also enhance creativity, acting as a tool like a pen. Used responsibly, it can help generate ideas, refine work, or improve outputs. Of course, legal and ethical considerations must be respected.

What advice would you give to younger researchers or those starting a career, possibly at Idiap?

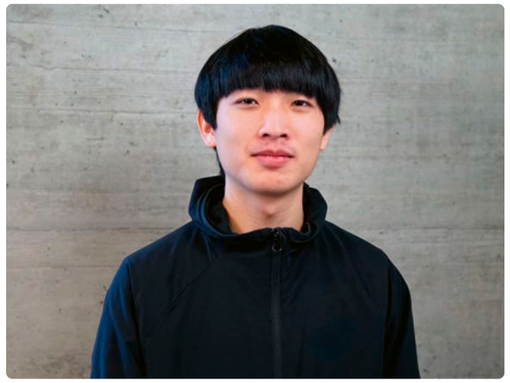
Focus on high-risk, high-reward ideas rather than small incremental improvements, which are often being explored by others. Share your ideas with trusted colleagues early—let them challenge your concepts. Also, gain experience by implementing known ideas, publishing code, and demonstrating your ability to execute projects. Collaboration is essential; you can't do it alone.

Anything else about Idiap you'd like to highlight?

Idiap provides a unique environment for reflection and research, away from everyday stress, surrounded by inspiring mountains. It's a place to think about bigger problems, and the diversity of people and ideas has always been its strongest characteristic.

My R&D internship

Born in Portugal to Chinese parents, Virgílio Li Dong's family settled in Switzerland when he was 10. He is about to complete his end-of-apprenticeship internship with the Institute's R&D team and talks about the experience.



Beginnings

After starting my studies at the Lycée-Collège de Saint-Maurice, I enrolled at the École Professionnelle Technique et des Métiers (EPTM) in Sion to pursue vocational training and to orient myself on a more practical path aligned with my passion for computer science. Today I'm in the final year of my apprenticeship—a one-year internship.

Why Idiap?

In the third year, we are required to complete two 3-month internships at different companies. Idiap's name came up as an option, but I didn't know much about it. My teachers, however, assured me that it was an excellent environment for an internship—an opinion I could fully confirm during those first three months.

I then chose to conduct my fourth-year, end-of-apprenticeship internship at the Institute for several reasons: the stimulating work environment, the richness of exchanges during internal presentations and conferences, the kindness and supportiveness of my colleagues, and the opportunity to observe real-world AI applications put into practice in projects.

Technical development, but not only

The experience has been extremely positive. I discovered many different application domains, robotics and biometrics included. I also acquired a solid foundation in programming, including the importance of software licensing, and developed my communication skills, particularly when it comes to capturing and maintaining an audience's attention during presentations.

On the technical side, I deepened my knowledge of image processing, of containerization using Docker, of web application development, and of continuous integration and continuous deployment (CI/CD) practices.

I also had the opportunity to take part in extracurricular activities such as representing Idiap at the Foire du Valais and attending a presentation by Samy Bengio—an Institute alumnus and now a researcher at Apple—and asking him questions. I also participated in sports activities organized by the Institute, such as badminton.

Looking ahead

The internship at Idiap allowed me to clarify my professional goals and better define the area of computer science in which I want to evolve. Before coming to the Institute I was considering not pursuing further studies. Now I plan to study for a Bachelor's degree in Computer Science and Communication Systems at HES-SO Valais-Wallis in Sion. In the longer term, I would very much like to come back and work at Idiap.

Awards

These awards recognize our researchers' contributions to AI.

Autoformalization in the Wild: Assessing LLMs on Real-World Mathematical Definitions	L. Zhang, M. Valentino, & A. Freitas	Best Resource Paper Award, Empirical Methods in Natural Language Processing (EMNLP) 2025, Suzhou, China.
Unified and Multimodal Learning for Gaze Prediction in Naturalistic Settings	A. Gupta	EPFL EDEE Thesis Distinction.
CCDP: Model-free Failure Recovery via guided Diffusion Sampling	A. Razmjoo, S. Calinon, M. Gienger, & F. Zhang	Outstanding Paper Award, The Art of Robustness: Surviving Failures in Robotics workshop of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) 2025, Hangzhou, China.
ManiDP: Manipulability-Aware Diffusion Policy for Posture-Dependent Bimanual Manipulation	Z. Li, J. Liu, D. Li, T. Teng, M. Li, S. Calinon, D. Caldwel, & F. Chen	Best Poster Award, Bimanual Manipulation: Advancing Human-Humanoid Interaction and Collaboration workshop of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) 2025, Hangzhou, China.
On the Information in Deep Biometric Templates: from Vulnerability of Unprotected Templates to Leakage in Protected Templates	H. Otroshi Shahreza	Best Doctoral Dissertation Award, IEEE Biometrics Council.
Co-Designing with Multiple Stakeholders and Datasets: A Community-Centered Process to Understand Youth Deviance in the Italian City of Turin	R. Annapureddy, A. Fornaroli, M. Fattori, V. Lacovara, E. Fiori, S. Vollmer, M. Konradi, B. E. Hecking, G. Todesco, & D. Gatica-Perez	Best Paper Award, International Conference on Communities and Technologies (C&T), Siegen, Germany.
Performance evaluation of SLAM-ASR: the good, the bad, the ugly, and the way forward	S. Kumar, I. Thorbecke, S. Burdisso, E. Villatoro-Tello, M. K. E, K. Hacioğlu, P. Rangappa, P. Motlicek, A. Ganapathiraju, & A. Stolcke	Best Paper Award, Workshop on Speech and Audio-Language Models (ICASSP).

The year in pictures

January

We launch the Distinguished Lectures series with Samy Bengio, Idiap Alumnus and Senior Director of AI and Machine Learning Research at Apple and Adjunct Professor at EPFL.

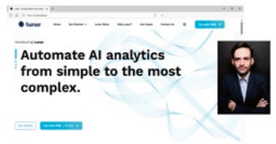
April

Oskar Wysocki wins a double grant (The Ark and Swiss National Science Foundation (SNSF) Bridge Proof of Concept) to launch an AI-powered fleet-management start-up.

June

Senior research scientist James Henderson receives a European Research Council (ERC) Advanced Grant for his project BALM.

André Freitas and three cofounders create Lunar AI Reasoning Sàrl, the latest Idiap spin-off.



March

Our R&D team collaborates closely with the Swiss Data Science Center (SDSC) on Renku, a platform for reproducible research.

May

We host the two-day Martigny Biometrics Workshop, gathering together more than 100 experts from around the world and fostering discussion on the latest advances and key issues in biometrics and artificial intelligence.

September

We participate at the Foire du Valais 2025, with the portraitist robot Drozbot producing more than 600 portraits in 10 days.

Hatef Otroshi receives Best Doctoral Dissertation Award from the IEEE Biometrics Council.

December

Idiap and EPFL renew their strategic alliance for the period 2025–28.

Anshul Gupta receives an EPFL EDEE Distinction for his PhD thesis.

August

We host the 14th edition of the Idiap Create Challenge, and we were truly jamming together!

October

James Hermus receives an SNSF Ambizione grant to advance human motor control and robotics.

Idiap Summer Party,
September 26, 2025,
Thyon 2000.

Finances

Balance Sheets as of December 31, 2025 and 2024 (CHF)

ASSETS	31.12.2025	31.12.2024
Cash	6 869 190	3 483 524
Accounts receivable	841 028	1 446 159
Accrued income and other	1 479 389	1 797 270
Total current assets	**9 189 605**	**6 726 953**
Equipment	917 797	744 537
Other assets	1 102 151	1 130 861
Patents and licenses	9	9
Financial assets	10 000	10 000
Total non-current assets	**2 029 957**	**1 885 407**
TOTAL ASSETS	**11 219 563**	**8 612 360**

LIABILITIES	31.12.25	31.12.24
Accounts payable	94 416	66 156
Accrued expenses	7 355 513	4 959 604
Provisions	30 000	0
Total foreign funds	**7 479 929**	**5 025 760**
Share capital	40 000	40 000
Research funds reserve	1 543 000	1 462 953
Special reserve	1 720 000	1 650 000
Retained earnings	433 647	428 447
Net income	2 988	5 200
Total own funds	**3 739 634**	**3 586 600**
TOTAL LIABILITIES	**11 219 563**	**8 612 360**

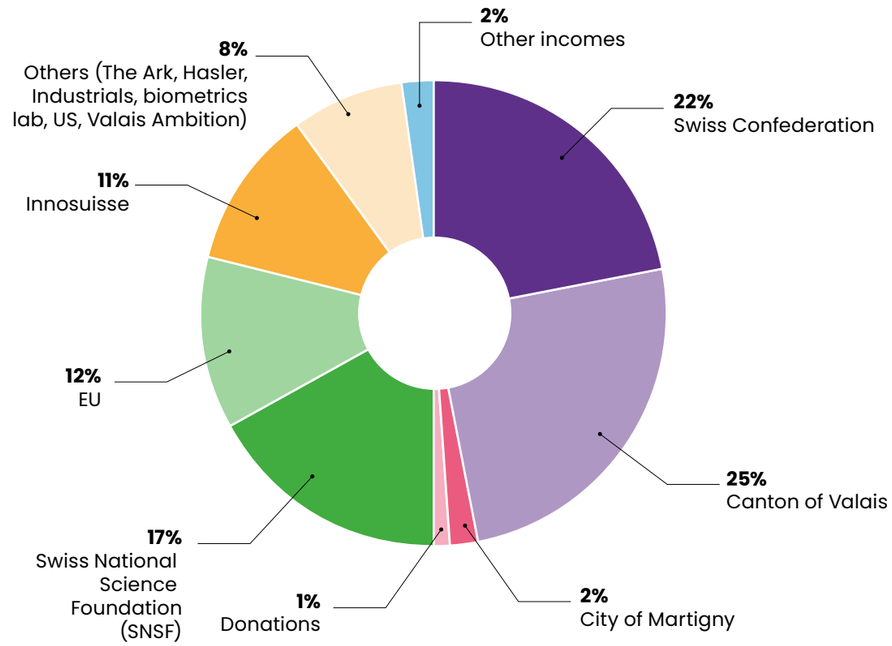
Profit and loss statement (CHF)

INCOME	2025	2024
Swiss Confederation Art. 15	3700000	4342800
Canton of Valais	4242642	4059146
City of Martigny	251155	502311
Third-party contributions	**8193797**	**8904257**
Donations	125250	96250
Donations	**125250**	**96250**
Swiss National Science Foundation	2885785	2286602
EU	1984079	1098063
Innosuisse	1901845	1941566
Others (The Ark, Hasler, industrials, biometrics lab, US, Valais Ambition)	1317287	2310215
Project funding	**8088995**	**7636445**
Subletting	97975	115850
Other incomes	169874	178358
Value created from research	14932	84452
Other incomes	**282781**	**378660**
TOTAL INCOME	**16690823**	**17015612**

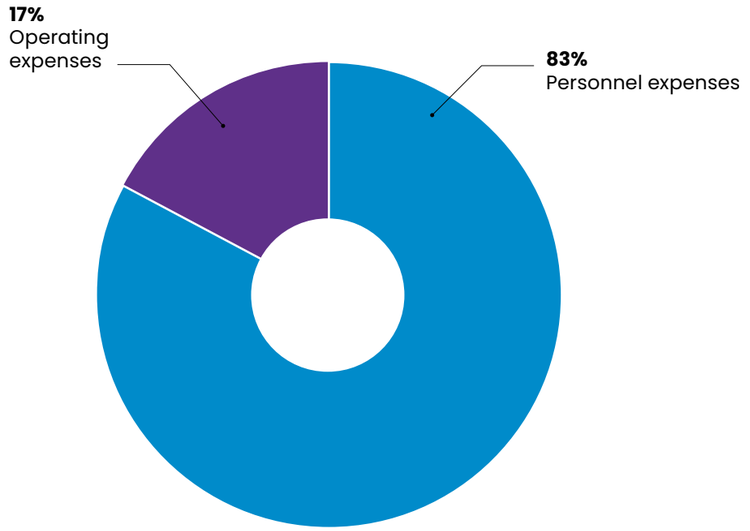
CHARGES	2025	2024
Personnel (incl. social deductions)	13710634	14142781
Operational costs	2907201	3017632
Allocation to operating reserves	70000	0
Dissolution of reserves	0	-150000
Total expenditures	**16687835**	**17010413**
OPERATING PROFIT/LOSS	**2988**	**5200**

Figures at a glance

Distribution of funding sources



Distribution of costs



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