



Swiss Al Initiative - Call for Large Grants

This is the document for the large grants. For the small grants, see <u>here</u>.

Overview

Al advances are progressing at a speed and scale never seen before, with unprecedented opportunities for disruptive breakthrough applications. However, the centralization of this key technology by a small set of private companies poses risks regarding system transparency & reliability, protection of intellectual property & personal data, and alignment with societal values. Addressing these risks is urgent as societal institutions are not adapted to the disruption and impact of an accelerated pace of Al deployment. The next five years will be pivotal in setting the norms for safe development and societal integration of Al technologies.

To unleash the benefits and mitigate the risks of these technologies for the Swiss economy and society, the Swiss Al initiative was created to build capacities for advanced large-scale trustworthy Al systems. The Swiss Al Initiative is operated by the Swiss National Al Institute (co-founded by ETH Zurich and EPFL). It brings together the leading Al researchers across Switzerland, leverages one of the world's leading Al supercomputers (with over 10'000 GH200 GPUs) managed by the National Supercomputing Center (CSCS), and fosters collaborations among various Swiss stakeholders (academic institutions, industry, start-ups, federal administration, and the public sector). The Initiative will provide artifacts such as transparent and open software, models, and data releases, enabling their trustworthy use by various Swiss stakeholders including SMEs and start-ups.

Through this collaboration, the Swiss AI Initiative will develop large-scale foundation models (the base of modern AI) that can reliably operate in multiple domains of core societal and economic interest, and develop new methods for large-scale training, multimodal integration, multilingual generality, alignment to societal values, uncertainty quantification, and sustainable learning. These developed systems will be aligned with the needs of Swiss stakeholders, enabling safe and effective deployment in sectors of importance for societal advancement and stability: education, law, climate, and more. Finally, the Swiss AI Initiative will engage with policymakers and associations to provide guidance & recommendations on effective policy and regulation around AI deployment that promotes economic growth while protecting the interests of Swiss citizens.

Large Project Grants

In line with the above goals, the Swiss Al Initiative provides funding to support the research and development of open science artifacts in core areas of foundation model development, as well as target application areas of critical societal importance.

The Swiss AI Initiative's main funding instruments are large compute-oriented project grants. Large project grants are allocated for a period of **one year**, and provide access to the CSCS Alps infrastructure and compute resources for AI projects that require large-scale training, evaluation, and deployment capabilities to be realized. Typically the compute amount requested might exceed 500K compute hours, though smaller amounts are also possible.

In addition to compute, applicants can request funding for personnel, such as PhD student years, postdocs, project engineers, project managers, and others, during the project duration. On top of that, a core team of engineers in the Swiss AI Initiative is also available to Large projects and different specialties (e.g., data curation, scaling, evaluation, platform design) may be requested in terms of FTE-months.

Available Resources

In 2025, through this and subsequent calls, we aim to distribute compute resources of 10-20M GPU hours. In 2025, approximately 2M CHF will be available to fund project-related personnel. Projects are expected to use 2/3 of the compute budget in the first 6 months of the project. Starting in July 2025, approximately 48 FTE-months of engineer work (the equivalent of 4 full-time engineers starting in July 2025) will be available for funded projects, as well.

Timeline and deadlines

Call Opens: February 28th, 2025

Declaration of Intent: March 24th, 2025 at 15:00 CET **Proposal Deadline**: March 31st, 2025 at 15:00 CET

There will be no exceptions to the deadline as initial evaluations of the proposals will happen on March 31st.

Decision Notification: May 7th, 2025 **Earliest Project Start Date**: May 8th, 2025.

Submission form: https://www.swiss-ai.org/grants

Scope

The call is open for all proposals that align with the goals of the Swiss AI initiative and require considerable resources to achieve their aims. Proposals should outline a research agenda that matches several of the following criteria:

- advance core AI capabilities (scalability, efficiency, alignment, safety, multimodal integration or evaluation)
- contribute to research advances in AI fundamentals or impact applications of AI

- benefit the Swiss or wider European or global ecosystem and societal context
- foster interdisciplinary collaboration, and/or collaboration across more than one group
- ensure ethical AI use and regulatory compliance
- promote principles of open science (including open-source, open weights, open data)
- foster participation of various stakeholders, such as public administration, SMEs, Startups, NGOs

For the Spring 2025 Call, we are specifically requesting proposals for the following application domains:

- LLMs
- Multimodality
- Al Safety
- Al for Education
- Al for Science (including biology, chemistry, physics, astronomy and others)
- Al for Health
- Al for Climate & Weather modeling
- Strengthening the interface of AI and democratic processes, including for example media, law and justice, or the public administration
- Al for Robotics

We will also consider proposals in other areas, however.

Eligibility

- Large project grants can be submitted by a team of one or more applicants.
- Each team must name one or more scientific leads to represent the team and who are responsible for deliverables, reporting requirements, and coordination with the steering committee.
- At least one scientific lead in the team must have an affiliation at an ETH Domain institution (ETH, EPFL and the 4 research institutions) and be employed in a permanent or tenure-track capacity for the duration of the project.
- Proposals may include applicants outside of the ETH Domain, including (though not limited to) cantonal universities, universities of applied sciences, companies, and international partners.
- Personnel funds are restricted to ETH Domain Institutions.
- All requested personnel funds require 50% matching funds by the applicants.
- The team must demonstrate that they have the relevant qualifications to complete the proposed project.

Application Format

Declaration of Intent

Applicants must submit a short declaration of intent by **March 24th, 2025**. The declaration of intent includes the tentative proposal title, keywords related to the proposal, and preliminary team composition (including identifying scientific leads). If you like, you can also indicate if you are looking for additional interested PIs to join your proposal.

Please submit your declaration of intent via this form.

Proposal

All documents must be submitted in English. The font size must be at least 10, line spacing 1.5, and margins of 2 cm on all sides. The documents must be submitted in PDF format. The research plan must not exceed 5 pages (A4 paper size), excluding the cover page, references and appendix (the appendix should include a descriptive table of contents outlining all preliminary results obtained for this project).

Templates for the research plans are provided in Word and LaTex format.

The proposal should clearly describe:

- the current state of the art in the related field,
- the objectives of the proposal,
- the expected activities and deliverables of this proposal (and the intended distribution & licensing strategy),
- the novelty and impact added as related to the scope of the call, and the importance of this project for Swiss, European, and global stakeholders,
- the team and the collaboration model. Optionally, the proposal can also outline synergies and intended collaborations with the larger Swiss AI Initiative beyond the project,
- Please also provide clear details on data availability and ethical considerations.

For large compute requests, scaling potential should already be validated at smaller scale running on the Grace-Hopper nodes on Alps. Please include in the appendix a description of: (1) the technical execution plan (e.g., software frameworks), justification of the amount of CSCS compute hours required,¹ and preliminary validation results at small scale running on the Grace-Hopper nodes on Alps.

Budget & Eligible Costs

A full budget must be provided for the use of the allocated personnel funds. Templates for the budget will be provided by the Swiss Al Initiative by **March 15th**, **2025**.

¹ Hours granted will depend on the overall amount of compute requested for accepted proposals. We do not guarantee that the full number of requested hours will be granted if the proposal is accepted.

Personnel requests should be justified with an expected list of activities (in the main proposal) for all requested positions and clear feasibility with respect to timing. Personnel funds distributed will require 50% matching funds by the applicants. Funds allocated by the Swiss Al Initiative need to be used during the official project duration, and can not exceed CHF 1M per project. Requests for engineering FTE hours (provided by engineers of the Swiss Al Initiative) will not need to be matched.

Further funds for technological transfer, outreach & communications, networking activities, public events, and workshops can also be requested from the Swiss Al Initiative.

Applicant scientific leads may not use funds to pay their own salaries or consulting fees.

Team

Each proposal must name one or more scientific leads who are responsible for deliverables, reporting requirements, and coordination with the steering committee. Cross-institutional and international collaborations are allowed and strongly encouraged.

All applicants of the team must submit a CV (max 3 pages), and those applying for personnel funding must submit their CV according to the <u>SNSF template</u>. All CVs need to be attached at the end of the single submission PDF. The CVs will be shared with reviewers during peer-review.

Evaluation

Large grant proposals will be reviewed by international external experts, and assessed by a panel organized by the Swiss National Al Institute.

Evaluation Criteria

Selection will be based on the following criteria:

- scientific excellence (as assessed by the international external reviewers)
- **strength and complementarity of the team** (as evidenced by prior collaboration, expertise diversity, and degree of inter-institutional or interdisciplinary collaboration)
- expected impact (as evidenced by expected value of open science artifacts, such as models, data, evaluations, platforms, etc., as well as planned technology transfer & outreach activities)
- **feasibility of the project in a one-year time frame** (as evidenced by initial preliminary results, experience managing large-scale Al projects, state of data collection, and plans for legal and regulatory compliance)
- alignment with the scope of the call
- alignment with the goals of the Swiss Al Initiative

Decisions

Selection decisions will be communicated by April 30th, 2025.

After acceptance

- A project report will be required upon completion of the one-year project.
- Selected projects must acknowledge the resources received by CSCS and the Swiss Al
 initiative.
- Your project might be asked to clarify the IP arrangements within the collaboration, such as for example to clarify how or if results will be open sourced.
- The research carried out in the framework of the project must comply with the scientific integrity and research data management regulations of the respective institutions. Applicants must also comply with the legal regulations at the federal and cantonal levels as well as with the relevant EU regulations. If applicable, your project might be asked to work with the EPFL & ETH AI Centers to prepare documentation describing the model and due diligence on training data that could be used in the case of future requests for disclosure by authorities or litigation on copyright, personal data, AI regulation etc. under Swiss or applicable foreign law.

Questions

Please contact <u>grants@swiss-ai.org</u> with any questions related to the March 2025 Call for Large Projects.