





### SPRACHMODELL FÜR DIE SCHWEIZER JUSTIZ DIE BASIS FÜR EINE VERTRAUENSVOLLERE KI



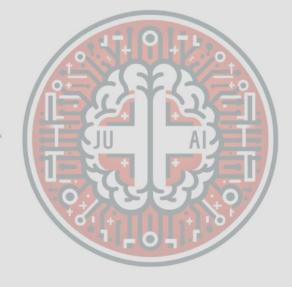
Entscheide



Lehre/Doktrin







Swiss Justice
Base Model
SJBM

### A powerful infrastructure



# The Alps infrastructure at the Supercomputing Center (CSCS) in Lugano

- 10'000 GH200 GPUs of the new NVIDIA Grace Hopper superchip
- Successful scaling for GenAl training (fast cluster interconnect)
- 30M GPU.hours per year reserved for Swiss AI Researchers for 2025-28

#### The Swiss Al Initiative



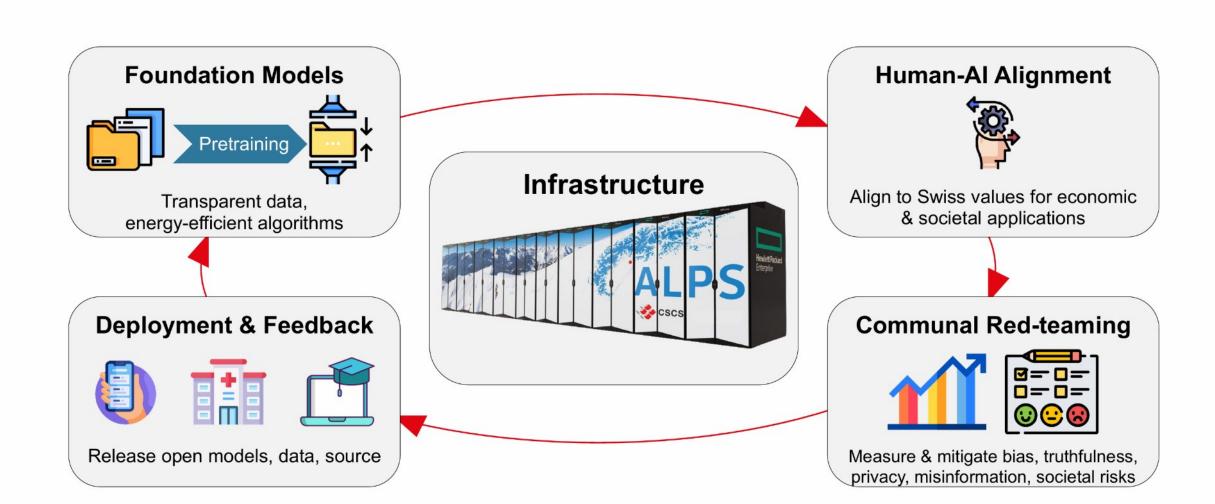
### Objectives: strengthen GenAl research and talent in Switzerland

- Research: Creates trustworthy AI Foundation Models with Swiss values, state-of-the-art capabilities, multilinguality, and multimodality
- Expertise: Brings together 70+ Al labs from various Swiss academic institutions, with 800+ researchers actively contributing to projects in 11 areas
- Talents: Educates talents with relevant skills for large-scale foundation model capability building
- Ethics: Ensures compliance with Swiss laws and regulations, promote ethical AI, and build a foundation for trustworthy, responsible and transparent technological innovation

## Impact: fostering GenAl innovation within Swiss society

- Drives GenAl innovation in areas of societal and economic importance
- Lowers entry barriers to GenAl, especially for SMEs and start-ups
- Reduces overall ecological footprint by leveraging the Alps infrastructure to avoid duplication in model training

## Principles: Trust, Openness, Collaboration



#### A huge expertise



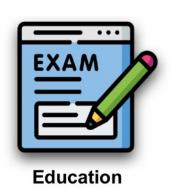
# Substantial funding & Operational framework

- The Swiss Al Initiative is benefiting of a 20M CHF public funding for 2025-28
- The Initiative has been integrated as a seed flagship project in the Swiss National Al Institute (SNAI)
- SNAI is aiming to:
  - Provide an operational structure to manage the Swiss Al Initiative
  - to propose an industry program
  - Set up a joint Fellowship program to attract talents
  - Create a joint PhD program



## Creating a Generative Al Ecosystem

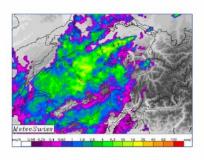
# Swiss AI is building large-scale open AI models for key sectors of the Swiss economy & society



& Training



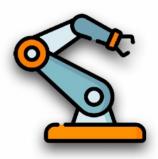




Climate & Sustainability



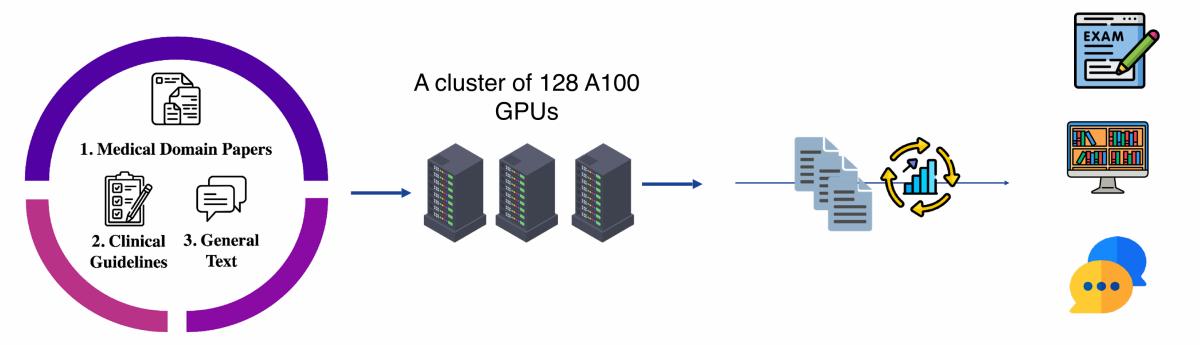
Scientific Advancement



Perception & Robotics



## Overview: Meditron

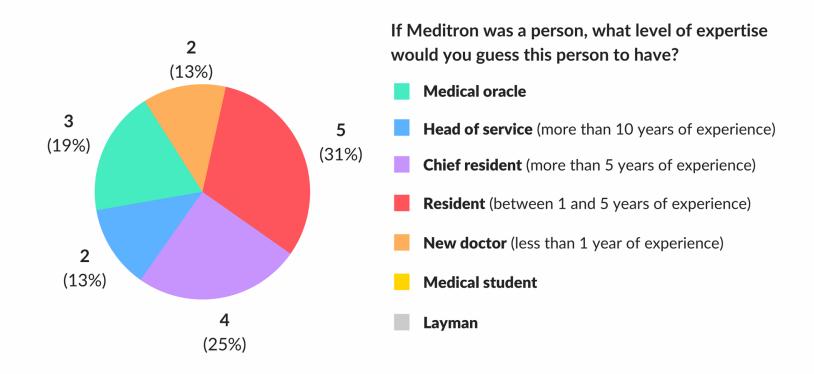


Compile Training Corpus Pretraining:
Compressing
Medical Knowledge

Tuning for Explainability

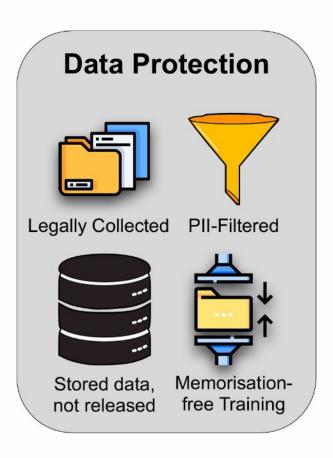
Holistic Evaluation

### Assessment of Abilities



14 out of 16 physicians on our panel agree Meditron's expertise is equal to or better than a medical resident

## Foundation Models for the Judiciary







## Benefits of Collaboration

#### Swiss Al Initiative:

- Access to high-quality domain-specific data for the legal and judicial sector
- Collaboration with legal professionals for data curation, model development, and evaluation

#### Swiss Legal and Judicial Stakeholders:

- Foundation models specialised for activities of the legal and judicial sector
- Access to capable tools to discover and drive new use cases (search engines, interactive agents)
- Collaboration with AI professionals for system development & deployment, technology tracking

And remember!...

- ✓ Strategie basierend auf offenen Sprachmodellen (Open
- ✓ Source)
- √ Lokale Rechenleistung (private Cloud)
- ✓ Lernen anhand von Daten und den Kompetenzen von unseren Juristen
- ✓ Zusammenarbeit mit Hochschulen und vor allem
- ✓ Bewusstsein für Risiken schaffen und Bereiche bewerten, wo die KI unsere Benutzer im Alltag unterstützen kann

# SWISS JUSTICE BASE MODELL VORTEILE FÜR DIE SCHWEIZ







**Schweizer Justiz** 



Schweizer Kultur



Digitale Souveränität



**Oekologie** 



Kosten Einsparung



### Next steps...

- The various Swiss AI Foundation Models are currently being trained with the Alps infrastructure
- First tests with small size models (8B parameters) shall take place during May 2025
- First large scale models (70B parameters) shall be available before the summer (June 2025)