# AI.BAY – Bavarian Initiative for Multimodal AI Foundation Models

# Call for Proposals

With AI.BAY, the Bavarian State Ministry of Science and the Arts (StMWK) promotes the establishment of an open, responsible, and innovative AI ecosystem in Bavaria.

The initiative aims to advance the development and integration of generative, multimodal Al foundation models (reading, writing, seeing, hearing, touching, acting) in accordance with European standards. These models are intended to provide a robust basis for applications across research, industry, public administration, and society, while simultaneously strengthening the Bavarian Al ecosystem through the expansion of personnel and computational resources.

AI.BAY represents a key component of the Free State of Bavaria's strategic commitment to technological sovereignty, complementing initiatives such as the Al Gigafactory Blue Swan and the Hightech Agenda. For comprehensive information regarding the initiative and the associated call for proposals, please visit the official project website: <a href="www.ai-bay.eu">www.ai-bay.eu</a>

#### Leadership:

Scientific Coordination: Prof. Dr. Björn Ommer (LMU Munich) and Prof. Dr. Wolfram Burgard

(University of Technology Nuremberg);

Project Management: Dr. Michael Klimke (Bavarian Al Agency)

## Eligibility, Funding & Duration

## Who is eligible to apply?

• Eligible applicants include professors and early-career researchers affiliated with public universities and universities of applied sciences (HAWs) in Bavaria.

### What is provided?

- Personnel funding (E13 TV-L positions)
- GPU resources on the dedicated GPU cluster established for the Bavarian Al foundation model initiative
- Central engineering capabilities for data processing and AI software engineering

### What is the project duration and conditions?

- Initial project phase: 15 months
- Possible extension: a second phase of up to an additional 21 months
- Submission of an interim report after 12 months, documenting the results achieved and providing justification for the extension
- Submission of a final report/documentation of results upon completion of the full funding period

## Objectives of the Call

The call supports projects that provide methodological or application-oriented contributions to the development of multimodal AI foundation models and to the strengthening of the Bavarian AI ecosystem, for example:

- Training a novel foundation model
- Efficient architectures or training methods for multimodal models
- Scaling, optimization, and energy-efficient implementation
- Training privacy-preserving and explainable models
- Modular extensibility and fine-tuning strategies
- Curated acquisition and provision of datasets for foundation model training

## **Encouraged:**

- Projects that combine multiple modalities (e.g., NLP, computer vision, robotics, medicine) and/or provide interfaces to additional modalities
- Operational demonstrators or prototypes offering testing capabilities
- Contribution of additional external resources (compute, personal and/or data)

## **Proposal Outline**

#### Scientific Contribution & Added Value

- Topic & modalities to be integrated
- Expected results and demonstrators to be developed
- Benchmarks, metrics, and comparisons with the state of the art to be performed
- Benefit for the Bavarian AI ecosystem
- Type of licensing for project results (specify for source code and AI models)
- Outlook on planned activities for a potential subsequent project extension

## Project Schedule and Required Resources

- · Work packages and milestones
- Requirement for personnel and computing resources (tabulated, including a breakdown of monthly computing demand over the project duration)
- Predefined criteria for early termination of project

### Team, Competencies, and Resources Provided

- Personnel to be employed and their roles & competencies within the proposed project
- Resources (GPU resources, data, and/or personnel) contributed by the applicants
- Demonstrated HPC/AI experience (e.g., through previously conducted scaling tests for project proposals on large scale HPC clusters such as those of GCS or contributions to own foundation models)

# **Proposal Submission Process**

- Deadline: 31 October 2025
- Length: 3–5 pages for the project outline
- Submission form: <u>submission-form.ai-bay.eu</u> → send to: submission-ai-bay@baiosphere.org
- Selection: The Bavarian State Ministry of Science and the Arts (StMWK) will decide on the projects to be funded

#### Contact Persons

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