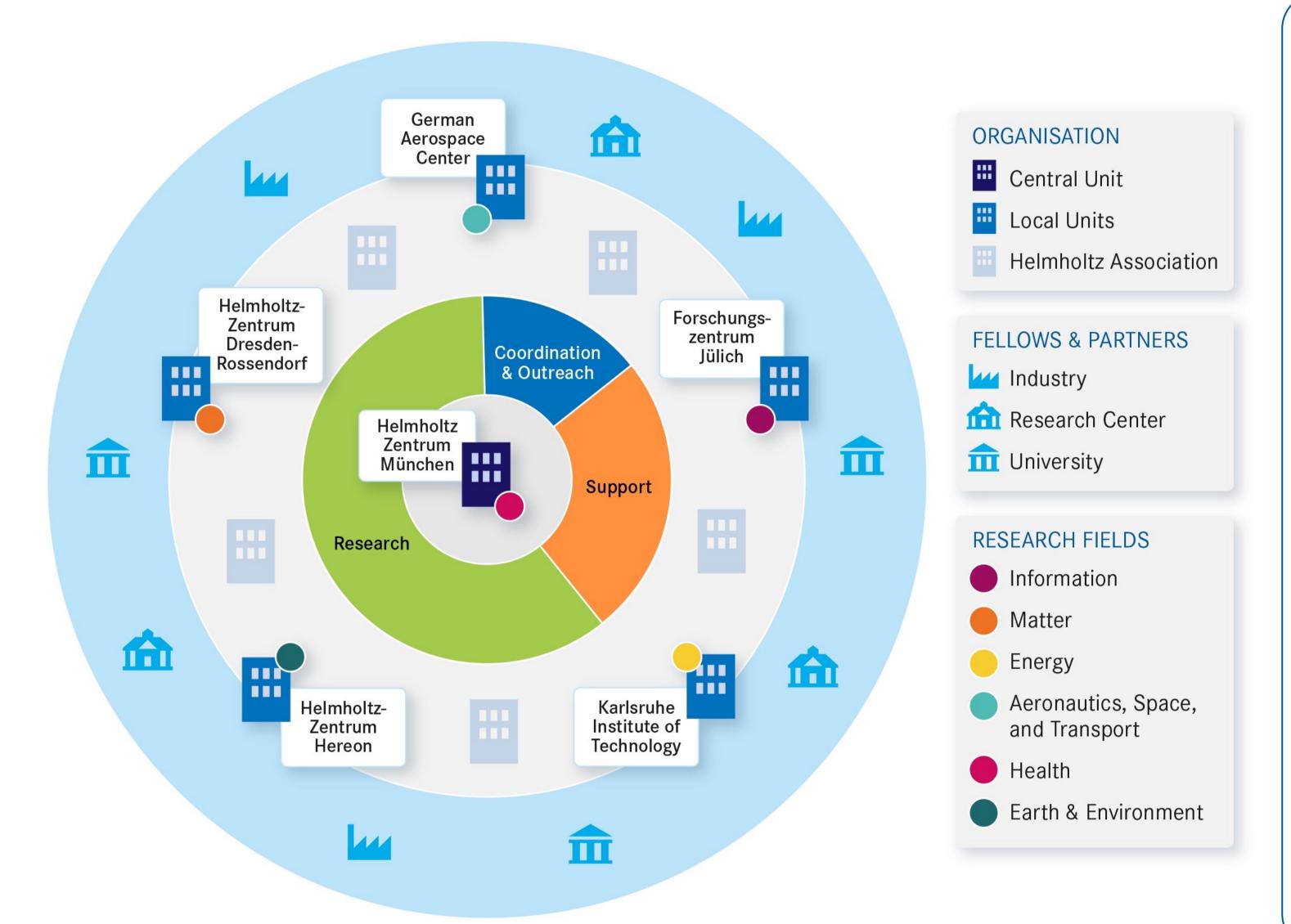
HELMHOLTZA ARTIFICIAL INTELLIGENCE COOPERATION UNIT



VISION

Reach an internationally visible leadership position in applied Artificial Intelligence (AI) / Machine Learning (ML) by combining unique research questions, data sets and expertise with newly developed AI/ML-based tools and democratized access to them in an open and dynamic community.

As one of the platforms initiated by the **Helmholtz Incubator Information and** Data Science, cooperation and openness is hardwired into our approach. We are convinced that coordinated efforts and cooperation are key for success: Integrating field-specific and technological excellence, ensuring quality and providing swift access - that is what Helmholtz AI is about.



MISSION

We are a research-driven hub for applied AI that

- fosters cross-field creativity by stimulating collaborative research projects
- identifies and leverages similarities between applications to advance generalised AI/ML methods
- integrates field-specific excellence and AI/ML prowess
- improves the quality, scalability and timely availability of emerging methods and tools
- empowers and trains the current and next generation of scientists

to enable the efficient and agile development and implementation of AI/ML assets across the whole **Helmholtz Association**.

STRUCTURE

We are structured as a hub-and-spoke model with six units across the Helmholtz Association built around our core themes:

RESEARCH

YOUNG & SENIOR INVESTIGATOR GROUPS

Carry out large, longterm AI/ML research projects

SUPPORT



HELMHOLTZ AI CONSULTANTS

Provide expert support to users across all Helmholtz Centres through a voucher system

COORDINATION & OUTREACH



SCIENCE MANAGEMENT

(only at HMGU)

Connect all partners and hubs, guaranteeing fluent daily business

Our headquarter is hosted by HMGU and we have local units (KIT, FZJ, HEREON, HZDR, DLR) together representing the six research fields of the Helmholtz Association.

LEADERSHIP

Steering Board (SB)

It coordinates and leads our activities and ensures that we act in the interest of the whole Helmholtz Association and in coordination with the Helmholtz Incubator Information and Data Science.

- Fabian Theis (HGMU)
- Guido Juckeland (HZDR)
- Judith Katzy (DESY)
- Andreas Kosmider (Helmholtz)
- Nadja Danilenko (Helmholtz)
- Timo Dickscheid (FZJ)
- Mario Fritz (CISPA)
- Ralf Mikut (KIT)
- Corinna Schrum (Hereon)
- Oliver Stegle (DKFZ)
- Frederik Tilmann (GFZ)
- Xiaoxiang Zhu (DLR)

Scientific Advisory Committee (SAC)

It provides advice on scientific developments, ensures that we work along the state-of-the-art and produce relevant scientific output.

- Florence Forbes (INRIA)
- Klaus-Robert Müller (TU Berlin)
- Stan Posey (Nvidia)
- Markus Reichstein (Max Planck Institute Biogeochemistry)
- Cordelia Schmid (INRIA)
- Bernhard Schölkopf (Max Planck Institute Intelligent Systems)
- Monika Sester (Institute Cartography and Geoinformatics Hannover)
- Jean-Philip Vert (Google Brain)

FUNDING

Annual project call



Cross-Helmholtz-center research on ML/AI challenges and methods



'High risk, high gain' project proposals (up to 3 years) that prize learning from (fast) failure over incremental success



Up to **€200k** from the funding line

2019 Call: 55 project proposals received, 19 funded

2020 Call: 62 project proposals received, 17 funded **2021 Call:** 33 project proposals received, 10 funded

Voucher system



Scientific support in applied AI research questions across the Helmholtz Association



Short term collaborations (2 weeks - 6 months) Support provided by AI consultants



Online voucher application system

Computing Resources



Access to computing resources is key for the Helmholtz AI community to accelerate innovative AI applications. There are two usage modalities:



Ad-hoc usage for initial playing with the data and/or AI methods @KIT



Lightweight projects of up to 10,000 GPU hours per half year @FZJ



Online voucher application system

STAY IN TOUCH



www.helmholtz.ai contact@helmholtz.ai





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