Helmholtz AI – An overview

Christoph Feest
Helmholtz AI
Head of science management
Helmholtz Research Mission & Strategy

- Systems solutions for grand challenges based on:
  - Scientific excellence
  - Interdisciplinarity and critical mass
  - Long term research programs

- Helmholtz provides a highly attractive environment for talents and brilliant brains

- Profound expertise in large scale research infrastructure

- Helmholtz as a prime strategic partner at the local, national and international level

- Transfer of knowledge into economy and society

ELBE, HZDR // AWI
The six Research Fields of the Helmholtz Association

- **ENERGY**
- **EARTH AND ENVIRONMENT**
- **HEALTH**
- **AERONAUTICS, SPACE AND TRANSPORT**
- **MATTER**
- **KEY TECHNOLOGIES (IN THE FUTURE: INFORMATION)**

- 19 research centers
- €5bn overall budget
- 42,255 employees
The six Research Fields of the Helmholtz Association

Everyone has BIG data.

Imaging

-omics

Health records
Our main goal is to become a **driver for applied artificial intelligence (AI)** through the development and distribution of AI methods across all Helmholtz centres, effectively **combining AI-based analytics with Helmholtz' unique research questions and datasets**.
Helmholtz AI

in a nutshell

6 LOCAL UNITS

- Earth @ HZG
- Energy @ KIT
- Matter @ HZDR
- Space @ DLR
- Health @ HMGU
- Info @ FZJ

RESEARCH

- 8 Young Investigator Groups
- Senior Investigator Groups

SUPPORT

- 6 AI consultant teams
- 27 AI consultants

MANAGEMENT

- 2 Project managers
- 1 Outreach manager
- 2 Exec. assistants
- 1 Software developer

Maximise research impact by democratising access to AI

- Foster cross-field creativity
- Identify & leverage similarities between applications
- Integrate field-specific excellence
- Improve quality, scalability and availability of emerging methods
- Empower current & next generation of scientists

19 HELMOLTZ AI PROJECTS (2019)

X ONGOING PILOT VOUCHERS

12 WORKSHOPS & HACKATHONS

11.4 M€ INVESTED/YEAR
Helmholtz AI

Central Unit (Helmholtz Center Munich)

SCIENCE MANAGEMENT
- Coordination & Outreach
- Support
- Research

AI CONSULTANTS
2nd recruiting soon

YOUNG & SENIOR INVESTIGATOR GROUPS
call for seniors out soon

RECRUITMENT
- AI Consultants + Head
- Junior Groups Leaders
- Senior Group Leaders
- Management

PROJECTS
- 1-3 years, €400k
- high risk - high gain
- annual call, second running

NETWORKING
- Fairs and industry
- Local, national and international ecosystem

Vouchers
- Low entry level: science & education
- Travel, workshops and data science collaborations

GLOBAL EVENTS
- Integrating the Association
- Kick-off: 5 March 2020
- 2022 Conference

LOCAL EVENTS
- February ’20: Health hackathon
- June ’20: Health roadshow
Based on the Helmholtz Incubator Process, Helmholtz AI is 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.**
Helmholtz AI is part of...

...data science initiatives within the Helmholtz Association

Research, funding & support
Helmholtz AI

Connect with us

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www.helmholtz.ai

Helmholtz AI