Contribution ID: 6 Type: **not specified**

Helmholtz Model Zoo

Friday 4 July 2025 12:05 (25 minutes)

The Helmholtz Model Zoo (HMZ) is a cloud-based platform that gives Helmholtz researchers seamless access to deep learning models via a web interface and REST API. It enables easy integration of AI into scientific workflows without moving data outside the Helmholtz Association.

Scientists across all 18 Helmholtz centers can contribute models through a streamlined GitLab submission process. HMZ automatically tests, deploys, and generates web and API interfaces based on submitted model metadata, supporting diverse use cases with minimal effort.

Inference runs on GPU nodes (4×NVIDIA L40) at DESY Hamburg via NVIDIA Triton Server, with data stored securely in HIFIS dCache InfiniteSpace and owned by the uploading user. Both open and restricted model sharing are supported.

Developed by Helmholtz Imaging at DESY, with support from HIFIS and Helmholtz AI.

Primary authors: EREN, Engin (DESY / Helmholtz Imaging); WERNERS, Hans William (IT (Research and

Innovation in Scientific Co)); HEUSER, Philipp (DESY/Helmholtz Imaging)

Presenter: EREN, Engin (DESY / Helmholtz Imaging)

Session Classification: Block 4 - Machine Learning Applications