

ARIC AI.LAB Brown Bag Session

10.02.2026 | Martin Welß

Die Landesregierung
Nordrhein-Westfalen



Fraunhofer
IAIS



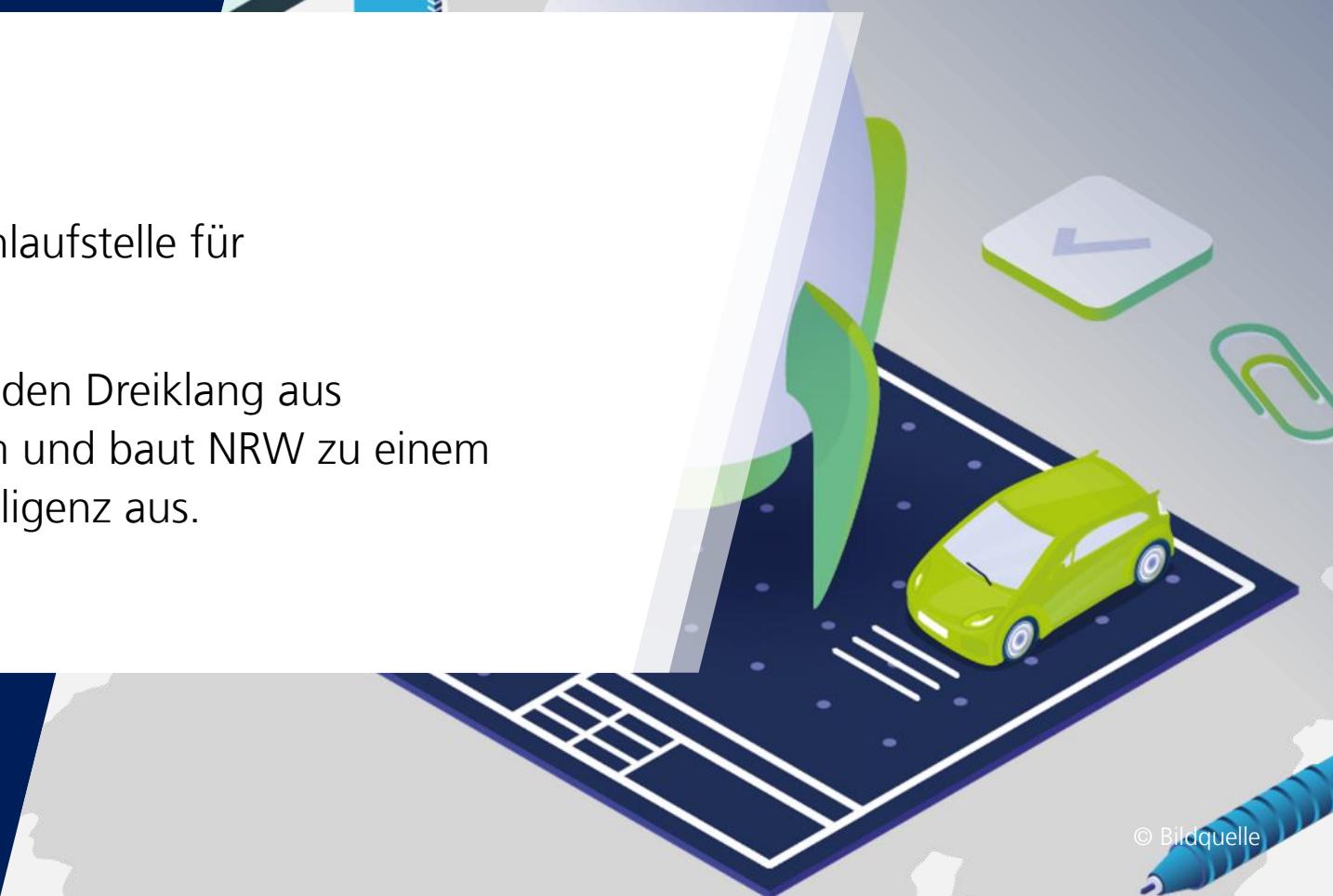
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Die Kompetenzplattform KI.NRW

Die Kompetenzplattform KI.NRW ist die zentrale Anlaufstelle für Künstliche Intelligenz (KI) in Nordrhein-Westfalen.

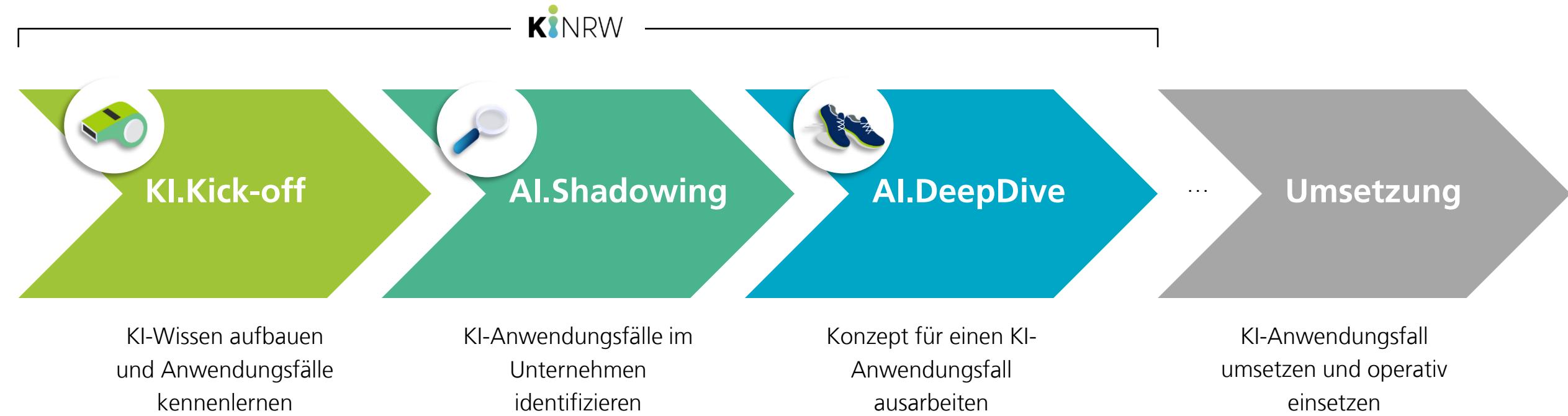
Als Landes-Dachorganisation für KI vereint KI.NRW den Dreiklang aus Spitzenforschung, Innovation und Unternehmertum und baut NRW zu einem bundesweit führenden Standort für Künstliche Intelligenz aus.



Struktur der Transferangebote von KI.NRW



Von Kick-Off bis zum Deep Dive



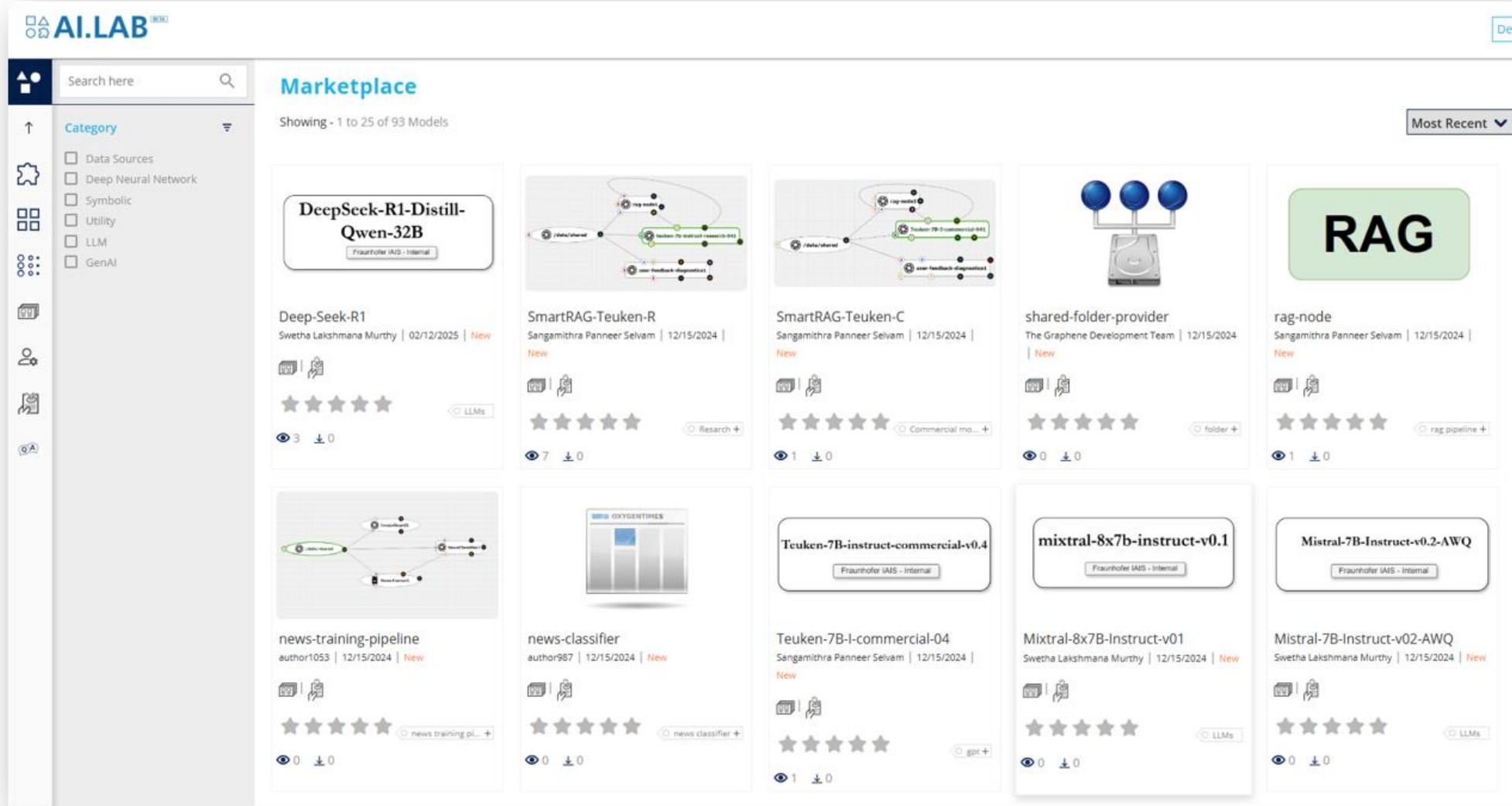
Wir sind präsent entlang der gesamten KI-Reise

Entwickeln Sie Ihr KI-Expertentum schrittweise und stetig



AI.LAB

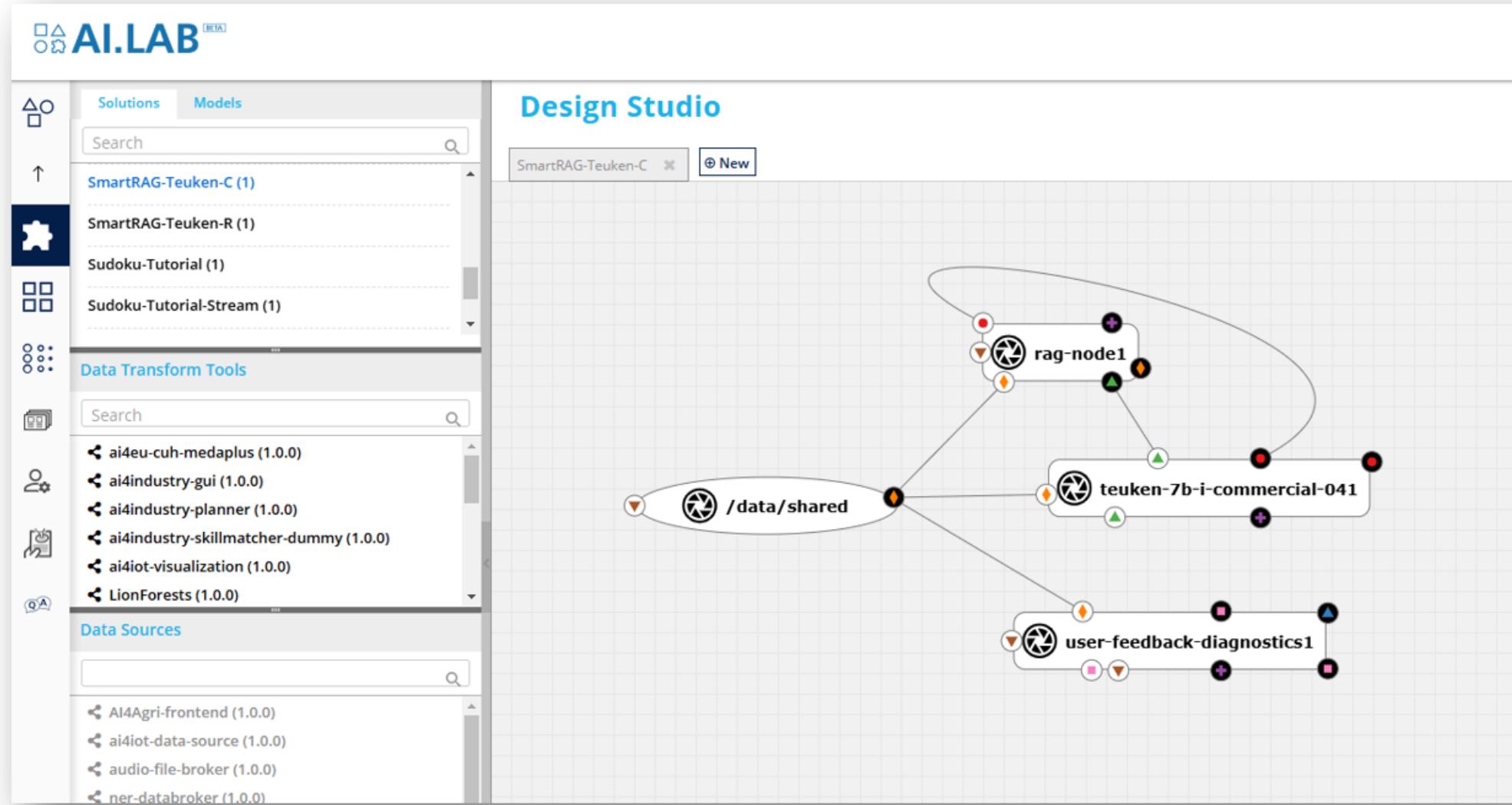
Katalog bietet Zugang zu verschiedenen KI-Modulen



The screenshot displays the AI.LAB Marketplace interface, showing a grid of 25 AI models. The sidebar on the left includes a search bar, category filters (Data Sources, Deep Neural Network, Symbolic, Utility, LLM, GenAI), and navigation icons. The main area is titled 'Marketplace' and shows models like 'DeepSeek-R1-Distill-Qwen-32B', 'SmartRAG-Teuken-R', and 'shared-folder-provider'. Each model card includes a preview diagram, name, author, date, rating, and download links.

Model Name	Author	Date	Rating	Description
DeepSeek-R1-Distill-Qwen-32B	Fraunhofer IAI - Internal	Swetha Lakshmana Murthy 02/12/2025	★★★★★	LLMs
SmartRAG-Teuken-R	Sangamithra Panneer Selvam 12/15/2024	New	★★★★★	Research +
SmartRAG-Teuken-C	Sangamithra Panneer Selvam 12/15/2024	New	★★★★★	Commercial mo. +
shared-folder-provider	The Graphene Development Team 12/15/2024	New	★★★★★	folder +
rag-node	Sangamithra Panneer Selvam 12/15/2024	New	★★★★★	rag pipeline +
news-training-pipeline	author1053 12/15/2024	New	★★★★★	news training pl. +
news-classifier	author987 12/15/2024	New	★★★★★	news classifier +
Teuken-7B-instruct-commercial-v0.4	Fraunhofer IAI - Internal	Sangamithra Panneer Selvam 12/15/2024	★★★★★	get +
Mixtral-8x7B-Instruct-v0.1	Fraunhofer IAI - Internal	Sangamithra Panneer Selvam 12/15/2024	★★★★★	LLMs
Mistral-7B-Instruct-v0.2-AWQ	Fraunhofer IAI - Internal	Sangamithra Panneer Selvam 12/15/2024	★★★★★	LLMs

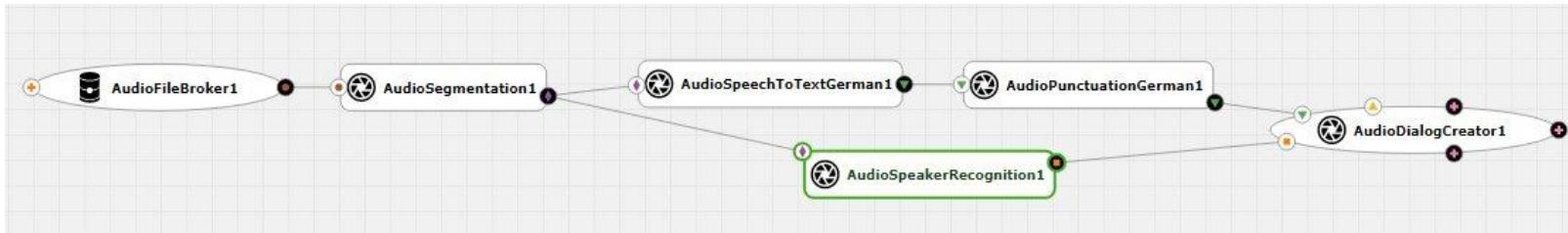
Design Studio für die Konfiguration der KI-Workflows



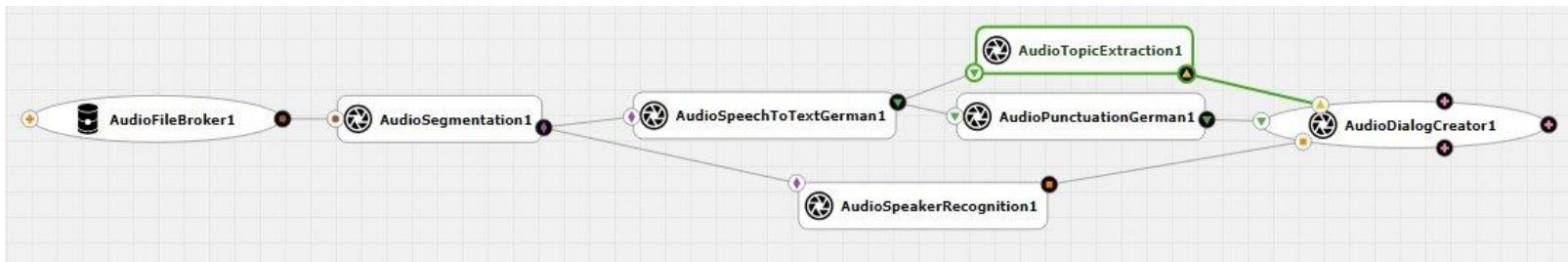
Die modulare KI-Architektur erlaubt die Wiederverwendung von KI-Modulen im Baustein-Prinzip



Basispipeline



Interpunktions hinzufügen



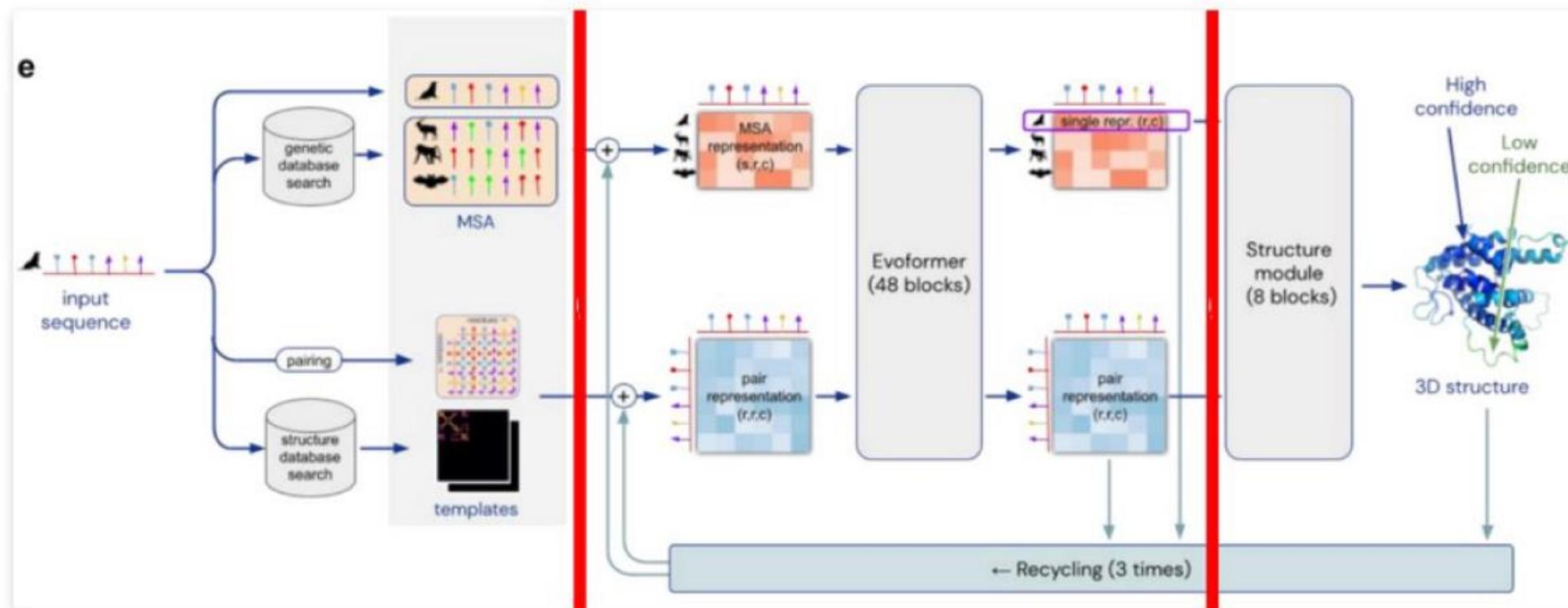
Sprecher-Erkennung hinzufügen



Themen-Erkennung hinzufügen

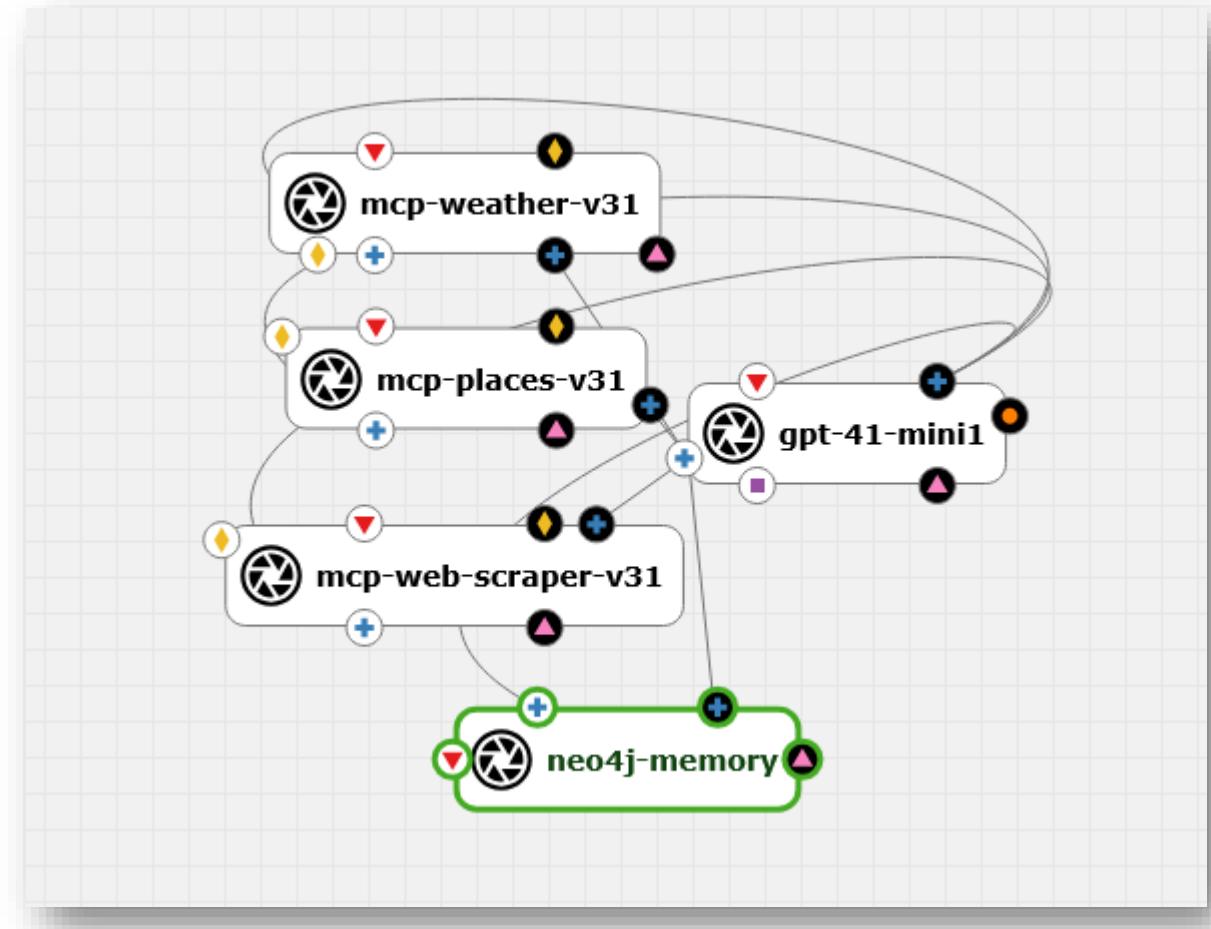
Deep-Mind: AlphaFold 2

- Predicts the 3D structure of proteins in biological cells (link)
- DNN to generate ideas of the 3D structure
- Rulebased molecule simulator to validate



Das Unified-LLM-Interface V3

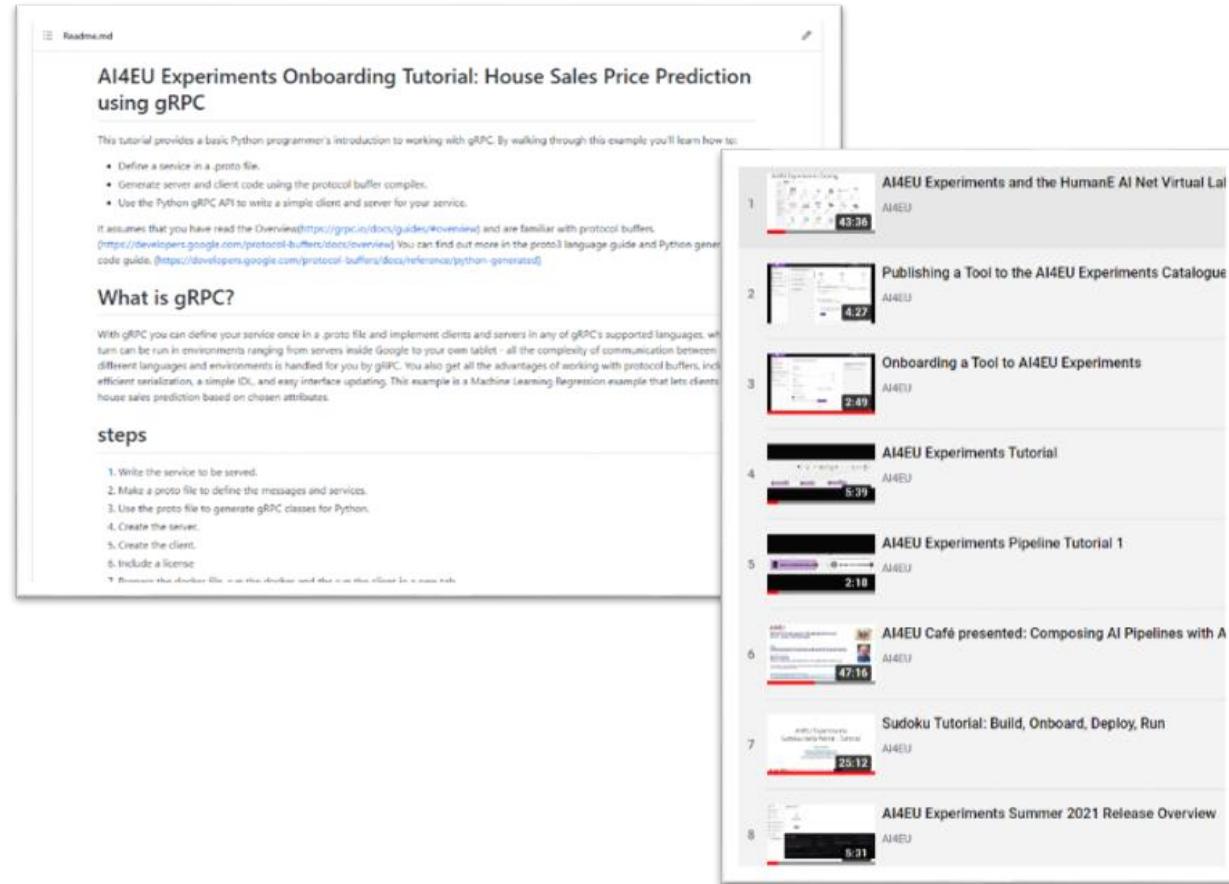
- Dient dazu, LLMs mit MCP-Agents und Long-Term-Memory zu verbinden
- Jeder Knoten kann ausgetauscht werden, ohne zu programmieren



- Versionierung und Deployment: Das AI.Lab umfasst den kompletten, mehrjährigen IT-Lebenszyklus
- Module zur Anbindung an vorhandene Backend-Systeme
- Erfassen von Metriken, um Module und Pipelines zu vergleichen
- Trainingspipelines mit GPUs auf Nvidia DGX oder sogar HPC
- Konzepte für AutoML (Die Trainingspipeline verbessert sich selbst mit jedem Durchlauf)

Links zur Dokumentation und Tutorials

- <https://www.ai-lab.nrw>
- [Module Specification](#)
- [Video Tutorials Playlist](#)
- [Source Code Tutorials](#)



The image shows two side-by-side screenshots. On the left is a screenshot of a GitHub README.md page titled "AI4EU Experiments Onboarding Tutorial: House Sales Price Prediction using gRPC". It contains a brief introduction, a list of steps to define a service, and a note about protocol buffers. On the right is a screenshot of a video playlist titled "AI4EU Experiments and the HumanE AI Net Virtual Lab". The playlist includes eight video thumbnails with titles such as "Publishing a Tool to the AI4EU Experiments Catalogue", "Onboarding a Tool to AI4EU Experiments", and "AI4EU Experiments Pipeline Tutorial 1". Each thumbnail shows the video duration.

Fragen?

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