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The Konrad Zuse Schools of Excellence in Artificial Intelligence funding programme

- As part of Germany's Federal Government's <u>AI Strategy</u>, the programme is funded by Germany's Federal Ministry of Education and Research
- Establishing and funding of three graduate school networks
- Zuse Schools provide an excellent and closely supervised research-based education in AI at master's and PhD level for AI talents from around the world
- Each school brings together a consortium of experts from science, non-university research institutions and business





Programme objectives

The programme contributes ...

to linking science and
business across different
disciplines and sites and to
intensifying the transfer of
knowledge in the field of AI

to increasing excellence in and the prospects of higher education and research through international exchange and the international attractiveness of Germany as a location for research in the Al sector

to **raising the profile**of AI content in research,
teaching, business and
society



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The programme's USPs

Networking

International network, internationally visible centres of AI excellence funding, networking with business, other universities and research institutions, networking between individuals (mentors, teachers, partners)

Excellence

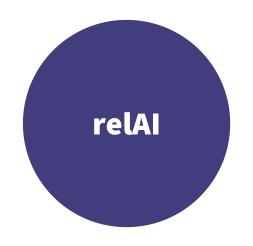
Excellence of research-based education, excellence in science and business, as well as in the involvement and inclusion of companies, excellent flagship projects

Future orientation

Continuous funding for master's and PhD students, funding for AI talents, links to AI research landscape and business, future-oriented research topics





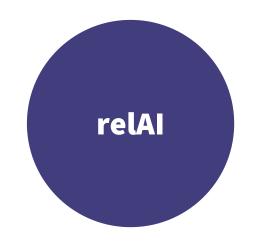








Konrad Zuse School of Excellence in Learning and Intelligent Systems (ELIZA)

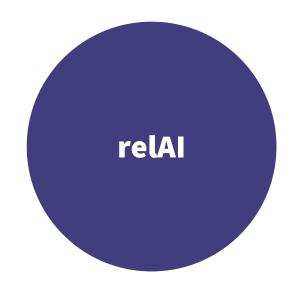








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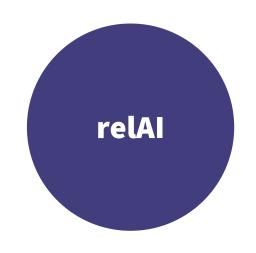
Konrad Zuse School of Excellence in Reliable AI (<u>relAI</u>)







Konrad Zuse School of Excellence in Learning and Intelligent Systems (ELIZA)



Konrad Zuse School of Excellence in Reliable AI (relAI)



Konrad Zuse School of Excellence in Embedded Composite Artificial Intelligence (SECAI)



Konrad Zuse School of Excellence in Learning and Intelligent Systems (ELIZA)



Research Focus

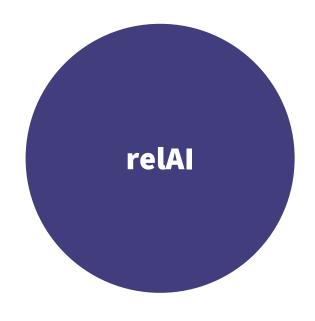
- Basics of machine learning (incl. computer vision, natural language processing, robot learning)
- Machine learning systems
- Applications in autonomous systems
- Transdisciplinary applications of machine learning in other scientific fields, from life sciences to physics

Host & Partners

- TU Darmstadt and research institutes in 7 German cities under the umbrella of the "European Laboratory for Learning and Intelligent Systems" (ELLIS)
- German industry



Konrad Zuse School of Excellence in Reliable AI (relAI)



Research Focus

- Mathematical and information technology foundations of reliable artificial intelligence
- Utilisation of reliable AI in high-impact application areas (robotics, healthcare, algorithmic decision-making)
- Resulting societal implications

Host & Partners

- Technical University of Munich and Ludwig-Maximilians-Universität München
- International AI centres
- Over 30 non-university research organisations and industrial partners



Konrad Zuse School of Excellence in Embedded Composite Artificial Intelligence (SECAI)



Research Focus

- Development of new, hybrid AI methods that combine statistical and symbolic approaches ("composite")
- Linking of AI with microelectronics and intelligent medical devices ("embedded")

Host & Partners

- TU Dresden and Leipzig University
- Strong partners in German industry
- Leading regional and international universities



The Advisory Board of the Zuse Schools

Experts in the field of artificial intelligence

- support and advise the Zuse Schools in the further development of their offerings
- raise the visibility and profile of the Zuse Schools in research, business, politics and society
- enable through relevant contacts the desired transfer of Al between science and industry

<u>Link: Advisory Board – DAAD</u>

Chair:

PROF. DR. THOMAS CLEMEN,

Professor of Computer

Science, HAW Hamburg

<u>Deputy Chair</u>: **DR. CLARA NEPPEL**, in Computer Science

PhD in Computer Science and Senior Director at the Institute of Electrical and Electronics Engineers (IEEE)



Current Challenges of the Zuse Schools programme



- Retaining AI talents in Germany
- German language skills (B1 level required for a residence permit in Germany)
- Increasing visa problems in some countries as a result of the global crisis situation
- Proportion of women in AI is to be increased
- Adress stakeholders in politics und industry to commit to the programme
- Follow-up funding after 2027



The facts

- Funding period 2022-2027
- Total budget around 40 million euros
- Up to 3 million euros per school per year



Start of funding

Master's: winter semester (October)
PhD: year-round



General info

Programme website www.daad.de/zuseschools



Applications

Submitted directly to Zuse Schools



Direct contact

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