



Doctoral Researcher / Research Assistant in AI-driven protein design (f/m/x)

Cologne Institute for Information Systems (CIIS)

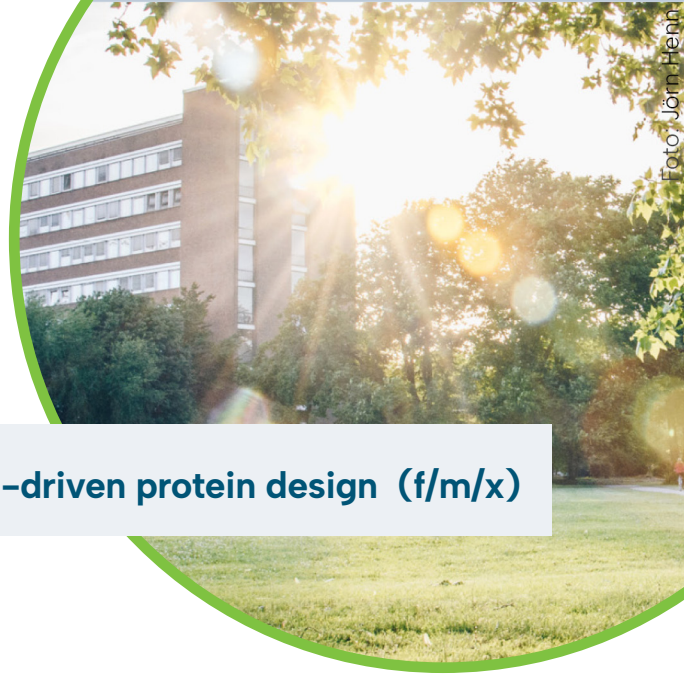


Foto: Jörn Henn

We are one of the largest and oldest universities in Europe and one of the most important employers in our region. Our broad range of subjects, the dynamic development of our main research areas and our central location in Cologne make us attractive for students and researchers from around the world. We offer a wide range of career opportunities in science, technology, and administration.

The Cologne Institute for Information Systems (CIIS) conducts interdisciplinary research at the intersection of information systems, artificial intelligence, and real-world application domains. Within an emerging research initiative on AI-driven protein design, we are offering a position for a doctoral researcher (f/m/x) at the Chair of Professor Dr. Detlef Schoder.

YOUR TASKS

- » Development and extension of ML-based protein design pipelines for predicting and optimizing binding in PPI contexts
- » Lead optimization of protein binders for predefined biological targets
- » Integration of physics-informed scoring functions into ML pipelines
- » Design and evaluation of hybrid scoring, frameworks combining AI-derived and physics-based features using experimental and in-silico datasets
- » Participation in international protein design benchmarks and competitions
- » Application of developed methods to biologics and therapeutic design use cases

YOUR PROFILE

- » Master's degree in Bioinformatics, Computational Biology, Computer Science, Information Systems, or a related field
- » Experience with at least one of the following is highly desirable:

- Structural biology / protein modeling
- Computational chemistry or biophysics
- Generative models or representation learning

- » Solid programming skills, willingness to learn Agentic AI approaches
- » Solid command of ML, pipelining, multi-variate statistics, DNN-approaches
- » Advanced level in English skills (German is a plus, but not required)

WE OFFER

- » Opportunity to pursue a doctoral degree in an interdisciplinary research setting
- » A diverse working environment with equal opportunities
- » Support in balancing work and family life
- » Occupational health management offers
- » Flexible working time models, position suitable for job sharing
- » Opportunity to work remotely

The University of Cologne promotes equal opportunities and diversity. Women will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from all suitable candidates regardless of their gender, nationality, ethnic and social origin, religion, disability, age, sexual orientation and identity.

The position is available from 1 June 2026 on a part-time basis (27,88 hours per week). The position is to be filled for a fixed term until 31 March 2028. If the applicant meets the relevant wage requirements and has the appropriate personal qualifications, the salary is based on remuneration group 13 TV-L of the pay scale for the German public sector.

Please apply online with proof of the required qualifications without a photo under: <https://jobportal.uni-koeln.de>. The reference number is Wiss2604-xx. The application deadline is 25 May 2026.

For further inquiries, please contact Professor Dr Detlef Schoder (schoder@wim.uni-koeln.de) or Souphaphone Phanpaseuth (phanpaseuth@wim.uni-koeln.de) and take a look at our [FAQs](#).

