Are you passionate about leveraging machine learning for enhancing our understanding of gene regulation? Then join the Omics Lab at the subinstitute of Bioinformatics (IBG-4) at the Institute of Biosciences and Geosciences (IBG). Our lab investigates the connection between gene sequence and gene regulation in plants using machine learning and "omic" technologies. Our work contributes to understanding the relationship between genome, environment and phenotype on the molecular level, with particular application to crops. We are a member of the Cluster of Excellence on Plant Sciences CEPLAS that aims to address challenges for sustainable food production and ecosystem maintenance posed by the increasing population and climate change.

We are looking to recruit a **PhD Position - Machine Learning for Annotation and Design of Gene Regulatory Elements in Plants**

**Your Job:**
- Drive the development and application of machine learning models for the annotation and design of gene regulatory elements in plants
- Collaborate closely with both internal teams and international partners to ensure seamless data integration and knowledge sharing
- Work on streamlining data processing and analysis pipelines
- Present your findings at renowned international conferences and publish them in top-tier scientific journals

**Your Profile:**
- A master’s degree in machine learning, computational biology, or a related field
- Solid foundation in statistics and machine learning
- Experience with deep learning models would be a significant advantage
- Experience with RNA-seq data would be a significant advantage

We look forward to receiving your application until 28.11.2023 via our [Online-Recruitment-System](https://www.fz-juelich.de). **Questions about the vacancy?** Get in touch with us by using our [contact form](https://www.fz-juelich.de). Please note that for technical reasons we cannot accept applications via email. www.fz-juelich.de
• Effective communication skills, aptitude for teamwork, and a collaborative mindset
• Familiarity with Linux and proficiency in programming (R, Python, Bash)
• Fluency in English, both written and spoken

Our Offer:
We work on the very latest issues that impact our society and are offering you the opportunity to actively help in shaping change. Here is what Forschungszentrum Jülich can offer you:
• A highly motivated group as well as an international and interdisciplinary working environment at one of Europe’s largest research establishments
• Outstanding scientific and technical infrastructure
• Targeted services for international employees, e.g. through our International Advisory Service
• Further development of your personal strengths, e.g., via a comprehensive further training program - a structured program of continuing education and networking opportunities specifically for doctoral researchers via JuDocS, the Jülich Center for Doctoral Researchers and Supervisors: https://www.fz-juelich.de/judocs

The position is initially for a fixed term of 3 years. Pay in line with 65% of pay group 13 of the Collective Agreement for the Public Service (TVöD-Bund) and additionally 60 % of a monthly salary as special payment („Christmas bonus“). Pay higher than the basic pay may be possible. Further information on doctoral degrees at Forschungszentrum Jülich including our other locations is available at: https://www.fz-juelich.de/gp/Careers_Docs

In addition to exciting tasks and the collaborative working atmosphere at Jülich, we have a lot more to offer: https://www.fz-juelich.de/en/careers/julich-as-an-employer/benefits

We welcome applications from people with diverse backgrounds, e.g. in terms of age, gender, disability, sexual orientation / identity, and social, ethnic and religious origin. A diverse and inclusive working environment with equal opportunities in which everyone can realize their potential is important to us.