Scientific Computing
University of Kaiserslautern-Landau

Ph.D. Position: Mathematical modeling and machine learning for cancer research

Project AI-Care: In pharmaceutical research, the early detection of undesirable or even absent effects of therapeutics represents the greatest hurdle to successful breakthroughs in the treatment of brain tumors. To achieve this, we are developing an AI-based model for the interplay of gene activity and therapy response. The goal is to predict the effect of drugs and optimize personalized therapies for cancer patients.

Learn more about the AI-Care project:

https://mv.rptu.de/fgs/mec/projekte/mutation-prediction-1

Responsibilities:

○ Development of mathematical and machine learning models for the AI-Care project
○ Implementation using Python and C++

Requirements:

○ Master's degree in mathematics, computer science, or a related field
○ Strong interest in mathematical modeling, machine learning, and bioinformatics
○ Ability to work collaboratively in a highly interdisciplinary environment with researchers from mathematics, computer science, biology, and medicine

Information:

○ **Institution:** Chair for Scientific Computing, RPTU
○ **Start of Employment:** As soon as possible
○ **Duration:** Up to 6 years (100% E13)
○ **Contact Person:** Prof. Dr. Nicolas R. Gauger, nicolas.gauger@scicomp.uni-kl.de