



## Announcement

As one of only eleven Universities of Excellence in Germany, we are the only university with as many as six Clusters of Excellence. Recent decades have seen us produce more winners of the Nobel Prize and Fields Medal than any other German university. The University of Bonn has a 200-year history of combining excellent research in a range of disciplines with research-led teaching.

The Horticultural Sciences group at the Institute for Crop Science and Resource Conservation (INRES) is a Department of the University of Bonn. We are an interdisciplinary research group investigating pathways to improve the sustainability and resilience of horticultural systems under changing and uncertain conditions. We are aiming at providing decision-makers with actionable information that helps them make wise choices, which requires adequate consideration of the complex environment that many agricultural decisions must be taken in.

The NIFAM project is a research and capacity building project led by scientists at the University of Bonn and implemented in Vietnam (and Myanmar) financed by the German Ministry of Agriculture. NIFAM aims to identify and implement cost-effective nutrition interventions to sustainably improve the diet of children in Vietnam. It uses the scientific approach of holistic Decision Analysis and develops probabilistic models in the R programming language using the decision modeling package.

We would like to build an interactive and intuitive user interface for the decisionSupport R package (<https://cran.r-project.org/web/packages/decisionSupport/index.html>), which we will use to translate our conceptual models to forecast the outcomes of the decision models. This user interface will streamline the process, allowing users to interact with the decisionSupport package more intuitively and efficiently while the R scripts should run in the background. By automating complex tasks and running R scripts in the background, the user interface will enhance usability and accessibility, enabling a wider range of our stakeholders and decision-makers to take into account large numbers of uncertain benefits, costs and risks that act in complex systems like food environments, food systems or ecosystems without requiring advanced programming skills.

To support the NIFAM scientific team, INRES is looking for a:

### Consultant in Programming (m/f/d)

#### Your duty will be:

- To develop a decision support user interface
- Collaborate closely with scientists who are using Decision Analysis in their research to develop the user interface
- to test the user interface together with scientists and project stakeholders until it runs satisfactorily and sustainably
- In the course of up to 12 months after submission of the services, the programmer will be available to assure the user interface runs satisfactorily. He/she will fix any problems that occur during the use of the user interface within these twelve months and assure that the interface can run sustainably.

#### We are looking for a programmer who has:

- excellent mastery of JavaScript/Typescript, Python, Vue and FastAPI (with additional programming possible in R, HTML, CSS and SQL) to develop the user interface for the decisionSupport R package.
- experience using GitHub
- good mastery of oral and written English (good mastery of German is an advantage)
- the ability to work independently, efficiently and target oriented



### Conditions

- Start of position is planned as soon as possible and the task/ service should be completed by the end of 2024.
- The University of Bonn will issue a service contract.
- This contract does not entail an employment relationship between the consultant and the University of Bonn. The consultant is responsible to pay taxes and social security contributions where required.

Interested candidates should submit a letter of interest, their CV and relevant certificates by 21.07.2024 via email and as one PDF document (less than 5 MB) to Dr. Simone Kathrin Kriesemer ([sk.kriesemer@uni-bonn.de](mailto:sk.kriesemer@uni-bonn.de)). Only shortlisted candidates will be contacted and interviews are planned for the week of July, 29th to 31st 2024.

In keeping with the University's policy regarding gender equity, female applicants are particularly encouraged. Disabled people with identical qualifications will be favoured.