

Research Software Professional - Full Stack Web Developer

INTEGRATED BIOSPHERE FUTURES (IBF) RESEARCH GROUP

Are you a passionate and motivated developer eager to build tools that drive real-world impact? The IBF Research Group at IIASA is seeking a Full Stack Web Developer to join its collaborative team and help develop a diverse ecosystem of digital tools supporting cuttingedge systems research in sustainability, land use, and environmental modeling.

THE ROLE

In this role, you will design, build, and deploy modular, open-source tools that support **a wide range of research activities**—from **data-driven workflows** and **modeling environments** to **Al-powered platforms for research dissemination and communication**. These tools are central to enabling and extending the reach of complex, interdisciplinary research.

Whether you are strongest in frontend design, backend architecture, cloud infrastructure—or somewhere in between—what matters most is your willingness to learn, explore new tools, creativity, and eagerness to collaborate across disciplines. If you're passionate about building meaningful technology and learning along the way, we would love to hear from you.

We are also excited to work with developers interested in the latest tools and trends—especially those exploring how **Alassisted development environments** can enhance creativity, boost productivity, and streamline the way we build.

ABOUT US

The **IBF Research Group** applies integrated systems modeling to address complex challenges in agriculture, forestry, climate change, biodiversity, and water management. Our work spans spatial and temporal scales—from local to global, and short to long-term horizons.

At the core of our research is GLOBIOM, a global economic land use model, and the emerging iBIOM framework—an open, modular modeling ecosystem supporting international decision-making. We maintain high-performance compute infrastructure and embrace modern software engineering practices to scale our science. This position will involve further enhancing the (backend) cyber-infrastructure around these modelling tools and (frontend) dissemination platforms.

- Develop scalable, maintainable web applications aligned with clean architecture principles.
- Collaborate with researchers, developers, and stakeholders to design fit-for-purpose software tools.
- Automate and streamline data-intensive workflows and modeling pipelines.
- Build intuitive user interfaces and robust backend systems using modern frameworks.
- Deploy and maintain applications on both cloud and on-premise infrastructure.
- Explore and integrate emerging AI tools to enhance development processes and research communication.
- Participate in agile software development cycles and continuously improve code quality, performance, and security.

QUALIFICATIONS

Education and Collaboration

- Bachelor's or master's degree in Computer Science, Engineering, or a related field.
- Strong problem-solving, organizational, and communication skills.
- Experience working in Agile teams.

Backend

- Proficiency in Python and frameworks like FastAPI, Flask, or Django.
- Solid understanding of clean architecture and testing practices.

Frontend

- Strong JavaScript/TypeScript skills (React, Vue, Next.js, Nuxt).
- Experience with HTML and modern CSS (e.g., Tailwind, SCSS).

Databases & Infrastructure

- Familiarity with relational and NoSQL databases (PostgreSQL, MySQL, MongoDB).
- Knowledge of cloud services (AWS), container orchestration (Kubernetes), and CI/CD pipelines.

AI Tools

- Interest in Al-assisted development environments (e.g., Cursor, bolt.dev).
- Desirable: experience with Al agent development or LLM integration.

WHAT WE VALUE

 Curiosity and a drive to explore new tools, frameworks, and ideas.

APPOINTMENT TERMS

The start date is negotiable but we hope that the selected candidate will be able to start as soon as possible in 2025. We offer an initial fixed-term, one-year, full-time (40 hours per week) employment contract, thereafter the contract can be extended to become open-ended. Eligible applicants wishing to work part-time hours may be considered.

The place of work is at the IIASA premises in Laxenburg, near Vienna in Austria.

The successful candidate will be appointed in accordance with the IIASA Research Software Professionals Profiles.

WE OFFER

- An international atmosphere and pleasant working environment in a historic market town surrounded by green areas.
- The possibility to contribute to environmental sciences for sustainability and global wellbeing.
- Career development perspectives.
- An attractive salary which is exempt from income tax in Austria and negotiable, based on the qualifications, skills and experience of the selected individual and at least:

EUR 55,280.00 (Subject to deductions for health insurance and/or social security.)

IIASA SALARIES ARE

- Not directly comparable with other employers in Austria, due to the unique legal status and privileges granted to IIASA.
- Subject to the principle of income aggregation (Progressionsvorbehalt in German).

- A collaborative mindset and clear communication approach.
- Interest in sustainability topics, systems research, and global impact.
- Attention to detail, organization, and a proactive attitude.

OTHER BENEFITS

- Educational subsidies for children of school age enrolled in private schools in Austria.
- A generous holiday entitlement.
- Relocation allowances and paid home leave.
- The possibility to work up to 100 days per year in home office (within Austria).
- Assistance for newcomers to Austria with visa, work and residency permit applications.
- Support finding accommodation in Austria.

Further details here.

About IIASA

IIASA is committed to a working environment that promotes equality, diversity, tolerance and inclusion within its workforce. This is reflected in our IIASA core values and the IIASA Gender Equality Plan (GEP). We encourage qualified candidates from all religious, ethnic, and social backgrounds to apply. In the case that candidates are equally qualified, preference will be given to applicants from countries where IIASA has a Member Organization.

Further Information

For further information about this opportunity please contact Michael Le Gohebel, BNR/IBF Program and Project Officer or Petr Havlik, BNR Program Director/IBF Research Group Leader.

For general information about working at IIASA, contact: recruitment@iiasa.ac.at

Applications

In order to apply for this opportunity, you will need to provide the following documents:

- A cover letter outlining your motivation for and fit to the position
- A detailed Curriculum Vitae
- The names, addresses (including e-mail), and telephone numbers of two work-related reference givers.

Deadline for receipt of applications: until filled

