

# **.NET Full Stack Developer**

### NOVEL DATA ECOSYSTEMS FOR SUSTAINABILITY (NODES) RESEARCH GROUP

The NODES Research Group is part of the IIASA Advancing Systems Analysis (ASA) Program. The focus of the group is to mobilize the tools of citizen science and data science combined with Earth observation to monitor, analyze, and foster progress toward the Sustainable Development Goals (SDGs) around the world.

### BACKGROUND

The successful candidate will have a full understanding and interest in web, desktop, mobile design and development, and be skilled in the .NET framework (ASP.NET / C#, .NET Core), modern Javascript frameworks (React, Angular, Vue) and ORM tools (Entity Framework [Core]). They will have an in-depth understanding of security issues related to web-based applications and how to build scalable systems for the modern web, and have experience in building and consuming RESTful APIs and applying the OAuth/OpenID authentication/ authorization principles. The ideal candidate is coding in their free time and has built lots of stuff for fun.

### MAIN DUTIES AND RESPONSIBILITIES

- Assist in the Development of GeoWiki and other current NODES projects
- Designing and developing software systems for scientific projects
- Assist on technical issues including software system design and maintenance
- Monitor quality and performance of applications through testing and maintenance
- Document all work for future reference

The incumbent will work with international developers and scientists, and must be able to work in, and have respect for, an intercultural environment, and IIASA core values. They must have a positive and professional work ethic and may occasionally work on other tasks assigned by their superiors, that might not be directly related to this appointment but where the post holder has relevant experience and skills, and/or a shortage of immediate personnel capabilities requires such.

### **APPOINTMENT TERMS**

#### The following skills and qualifications are required:

- A degree in Computer Science, Engineering or similar or several years' hands-on experience in application development
- Excellent written and oral communication skills
- Proven experience and working knowledge of .NET, ASP.NET, C#, .NET Core, JavaScript, TypeScript
- Efficient use of relational and non-relational databases (PostgreSQL/PostGIS, SQL Server, MongoDB, Redis) and experienced in using ORM frameworks
- Unit and integration testing experience
- Experience with RESTful web services, GraphQL and designing and consuming APIs
- Familiarity with Kubernetes, Docker Swarm and Microsoft Azure
- Understanding of other technologies and concepts desirable e.g., Microservices, SignalR, WebSockets
- Proficient at debugging and problem solving
- Familiarity with Web optimization and bundlers gulp, grunt, webpack

## Experience in the following would be advantageous:

- Node.js, PHP Skills
- CI/CD experience Azure Pipeline, GitHub actions
- GIS Skills (python scripting, ArcGIS, QGIS)
- Open-source geospatial tools GDAL/OGR, GeoServer, OpenGeo Suite
- Mobile app development Android, iOS, Xamarin, Flutter
- Big Data Processing, Machine Learning

the position by 1 November 2021, or as soon as possible thereafter. We offer an initial fixed-term, full-time (40 hours per week) employment contract for one year, with the possibility of extension thereafter. Eligible applicants wishing to work part-time hours may also be considered.

Duties will be carried out at the IIASA premises in Laxenburg, near Vienna in Austria (up to 100 days per year home office working within Austria possible).

This position is classified as a "Professional" level post.

### **WE OFFER**

A **minimum** gross full-time (40 hours per week) annual salary of EUR 40,564.00 which is exempt from income tax in Austria.

The advertised salary is:

- Negotiable, based on the qualifications, skills and experience of the selected individual
- Subject to deductions for health insurance and/or social security
- 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).

### **IN ADDITION**

- Educational subsidies for children of school age enrolled in private schools in Austria
- A generous annual leave entitlement
- Moving and settlement allowances and paid home leave for employees in scientific and professional categories hired from international locations
- 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 <u>Core values</u>. 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 <u>National</u> <u>Member Organization</u> (NMO).

## **Further Information**

For further information about this opportunity please contact:

<u>Ian McCallum</u>, NODES Research Group Leader and Senior Research Scholar.

For general information about working at IIASA, please contact:

recruitment@iiasa.ac.at

## **Applications**

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
- Your Curriculum Vitae
- The names, addresses (including e-mail), and telephone numbers of two work-related reference givers

Deadline for receipt of applications: until filled

APPLY