



RECRUITMENT ANNOUNCEMENT

DSS/Web Application Developer

ICEM – International Centre for Environmental Management is an award-winning independent technical service centre that assists the government, private sector and communities in defining and implementing policies for sustainable development. Established in Australia in 1999, ICEM has its regional headquarters in Hanoi and is staffed by full-time international and national technical and administrative personnel.

ICEM works in Asia and the Pacific and focuses on climate change, water resources management, disaster risk reduction, renewable energy, environmental assessment, environmental economics, nature-based solutions and biodiversity conservation. ICEM seeks to integrate environmental concerns with development through spatial planning, modelling, socio-economic analysis and environmental assessment tools.

ICEM is now seeking to employ a **Decision Support System/Web Application Developer** in Hanoi, Vietnam, on a two-year renewable contract. The candidate will report to the ICEM GIS and Modelling Manager and work in close interaction with relevant senior international colleagues.

Responsibilities

- *Overall role:* Support the design, development, deployment and management of innovative open-source geospatial web-based applications and decision support tools for climate risk informed planning and spatial analysis
- *System design and development:* Provide input to the design and development of user-friendly, interactive, responsive and scalable web-based applications using the R programming language and its Shiny web application framework (or other software as applicable)
- *Data integration and management:* Integrate multiple data sources, including databases, real-time data, and external APIs, into the DSS. Ensure data quality, consistency, and timeliness for accurate decision-making. Optimize the performance of the DSS, ensuring that it can handle large datasets and perform complex calculations efficiently
- *User interface development:* Build and optimize user-friendly interfaces that allow users and decision-makers to interact with the system, run queries, generate reports, and visualize data. Implement advanced reporting features like dashboards, data visualizations, screening and ranking tools, and custom reports that help users interpret results and take action
- *IT system administration:* Support the deployment, testing and management of web-based applications, including the use of Docker virtualization, and other IT administration tasks
- *Knowledge management and capacity building:* Support the training of DSS administrators and users, as required, including drafting of technical manuals in English to international standard



Qualifications

- A minimum of a BSc in computer science, software engineering or an information technology-based discipline, or demonstrated experience in web application development
- A good knowledge of open source software systems
- 3+ years of experience in R programming, including in the use of R-Shiny to develop web-based applications; supported frameworks and libraries: Leaflet, OpenLayers (display maps and GIS data); and HTML, JavaScript and CSS for building advanced user interfaces
- 3+ years of experience in using spatial data (GIS) and web GIS; in installing and maintaining server software systems, and/or server administration (Linux and Windows)
- 5+ years of experience in designing and developing websites, including styling of HTML with CSS
- A willingness to learn and develop new skills as required.

Additional qualifications and skills

- A background or knowledge in environmental management, hydrology or environmental science, would be highly regarded
- Experience in using Docker virtualization

Applicants should be fluent in English with proven technical writing and presentation skills.

To apply, interested applicants should send a cover memo and updated CV with contact details of two references to ICEM at Nguyen Thu Phuong (admin@icem.com.au). For more information about ICEM, visit www.icem.com.au

Applications close on 20 April 2025.