

Company Description

BC3 is a Research Centre on the causes and consequences of climate change. Led by one of the most recognized scientists in the Climate Change field -Prof. Maria José Sanz, we produce multidisciplinary knowledge to support decision making towards sustainable development at the international level. With a multidisciplinary team, connected to the main scientific institutions, networks and socio-economic agents, for a decade, our contribution to research of climate change and to the science-policy interface puts us in a unique position to offer knowledge, tools, new methodologies and cross-cutting proposals, that we lead towards action in a collaborative framework with stakeholders, to design and help implement policies aimed at sustainable development.

Information

 Deadline: 2022-04-02
 Category: Academia
 Province: Bizkaia

 Country: Basque Country
 City: Leioa

Company

BC3 Basque Centre for Climate Change



Main functions, requisites & benefits

Main functions

The Basque Centre for Climate Change (BC3) offers a full-time position as System Manager & Cloud Services in order to support the research activities of Research Line (RL) 5 on Integrated Modelling of Coupled Human-Natural Systems. The RL generates multidisciplinary scientific knowledge from human-nature interdependence to address complex sustainability problems through artificial intelligence (AI). The goal of the RL is to provide environmental data, models and understanding by retrieving, evaluating and integrating the existing information in order to support an effective policy-making where nature counts. Besides Ecosystem Services, the RL also tackles Natural Capital Accounting, Food Security, Marine Spatial Planning, and Renewable Energy. During the past decade, the RL has envisioned and built the ARIES (ARTificial Intelligence for Environment and Sustainability (<https://aries.integratedmodelling.org/>) platform, a technology that integrates network-available data and model components through semantics and machine reasoning. Its underlying open-source software (k.LAB, <https://docs.integratedmodelling.org/technote/>) handles the full end-to-end process of integrating data and with multiple model integration types to predict complex change. It also supports selection of the most appropriate data and models using cloud technology and following an open data paradigm: the resulting insight remains open and available to society at large, and becomes a base for further computations, contributing to an ever-increasing knowledge base. For the first time, it is possible to consistently characterize and publish data and models for their integration in predictive models, building and field-testing technologies that have eluded researchers to date. We are looking for an individual who can support strategic activities related to integrated data science and collaborative, integrated modelling on the semantic web (semantic meta-modelling). The selected candidate will: Contribute to the ARIES (ARTificial Intelligence for Environment and Sustainability) platform, a semantic web infrastructure that uses artificial intelligence (AI) to build computational solutions to environmental, policy and sustainability problems. This technology, based on machine reasoning, machine learning, distributed computing and high-performance, multi-disciplinary and multi-paradigm system modelling, is the flagship product of the Integrated Modelling Partnership (IMP) which is expected to serve a growing number of worldwide users (from academia, governments, NGOs and industry) in the years to come. Responsibilities: Implement continuous deployments and maintain IT infrastructure Automate software builds, code changes and deployments whenever possible Troubleshoot, debug and communicate solutions to the development team Responsible for web services and communication tools used by the internal and external team members Create new functions and features in the K.Lab framework

Requisites

Desired Skills: Experience deploying containerized workloads in virtual environments Docker, Vsphere, Linux or other orchestration systems skills Jenkins, Github Actions or other build automation tools Familiarity with Java, the Spring Framework and debugging tools General Linux administration and scripting experience Understanding of distributed systems and the communication between services