Post-Doctoral Fellow – Data Scientist

The International Maize and Wheat Improvement Center, known by its Spanish acronym, CIMMYT®, is a not-for-profit agricultural research for development organization with partners in over 100 countries. Please refer to our website for more information: www.cimmyt.org

CIMMYT seeks an innovative, self-motivated, and results-oriented candidate for the position of Data Scientist (Post-Doctoral Fellow) to work on improving maize (and wheat) agri-food systems in sub-Saharan Africa and other parts of the developing world. The holder of this position should conduct and contribute to collaborative research at the nexus of agricultural research, applied micro-economic research, and geospatial modeling of human and biophysical systems, drawing on large amounts of data, and using a variety of machine learning and data-mining approaches. The specific research focus of this position is to better understand the opportunities for sustainable intensification in smallholder farming systems, through the use of geospatial analysis and modeling approaches. The position will contribute to a number of research activities focused on sub-Saharan Africa.

This post-doctoral fellow will work as a member of CIMMYT’s Socio-Economics Program in close collaboration with other CIMMYT programs and with public, private, local and international partners.

The position will be based at CIMMYT’s in eastern Africa (Ethiopia office, located in Addis Ababa or Kenya office, located in Nairobi).

Specific duties:
→ Contribute to the development of analytical models for ex ante evaluation of impacts of new production technologies at scale using a variety of machine learning and data-mining approaches.
→ Development of tools for quick monitoring of data collected via CAPI software.
→ Integration of data from multiple sources, e.g. household surveys, farm trials, market information, remote sensing and geospatial data.
→ Provide support to the development of project proposals and reports.
→ Produce peer-reviewed research articles.
→ Other duties as assigned by the supervisor.

Required academic qualifications, skills and attitudes:
→ A recent Ph.D. in statistics or a quantitatively-oriented social or natural science.
→ Experience with modern statistical learning approaches, including machine learning algorithms and data mining techniques.
→ Experience with spatial modeling.
→ Competency in R and/or Python.
→ Strong understanding of database architecture, statistics, data visualization, etc.
→ Expertise in working with large data sets.
→ An ability to teach others.
→ Ability to analyze and understand data from diverse sources, including household survey data, farm trials data, and remote sensing data.
→ The selected candidate must exhibit the following competencies: Proactive, Problem Solving, Decision-making, Achievement Orientation and Teamwork.

Desired qualifications:
→ Experience in a role of a similar nature.
→ Experience with Shiny applications in R.
→ Theoretical training and applied experience with household econometric modeling.
→ Familiarity with agent-based models.
→ Experience with geospatial data and geographic information systems.
→ Competency in SQL or related database query languages.

The position is for an initial fixed-term for two (2) years, after which further employment is subject to performance and the continued availability of funds. CIMMYT’s internationally competitive salary an benefits.

Candidates must apply here for IRS18116 PDF – Data Scientist. Screening and follow up will begin on Friday, 13 April 2018. Applications must include a CV and a letter of interest. Incomplete applications will not be taken into consideration. For further information on the selection process, please contact Yessica Castillo, at y.castillo@cgiar.org.

Please note that only short-listed candidates will be contacted.
This position will remain open until filled.

CIMMYT is an equal opportunity employer. It fosters a multicultural work environment that values gender equality, teamwork, and respect for diversity. Women are encouraged to apply.