

Lead Data Scientist

About the Role

Kimetrica is seeking a Lead Data Scientist to join our team and help us achieve our mission to increase the effectiveness of spending in the social sector. This position is based in Denver, Colorado. We are an international company with a diverse and highly skilled staff, ranging from software developers to economists to subject specialists in project and disaster risk management. This role requires expert python knowledge with a deep applied understanding of ML and Bayesian modeling. The right candidate will have good technical leadership skills and a strong logistics and managerial support background. Most of the projects are cross-disciplinary, examining the interactions between remotely sensed and ground survey and sensor data. This is an opportunity to influence policy making in leading international institutions.

Scope

- Lead technical projects primarily modeling for decision-support in the humanitarian and international development space
- Research and literature reviews for identification of appropriate approaches, methods and datasets
- Implementation of models in python
- Oversight of documentation of models (largely automated)
- Supervision, code review and merges of team members
- Contributions to technical proposals for bids and tenders
- Liaison with software developers for implementation of reusable scripts, optimization and server operations
- Technical write ups of findings and contributions to presentations
- Ensuring re-usable python libraries are developed
- Liaison with clients for understanding requirements, progress reporting
- Management oversight of project sprint planning process and Git repository / version control
- Identification of emerging staff needs and any hardware and software requirements and liaison with HR and Operations to ensure timely resourcing

Requirements

- Applied knowledge of machine learning techniques including linear models, tree based methods for regression and classification, and deep learning / neural networks
- Applied knowledge of unsupervised machine learning techniques, like clustering.
- Solid command of Python and use pertinent libraries for data analysis and machine learning. You are comfortable with coding in both jupyter notebooks and IDEs.
- Solid knowledge of Git for code version control
- Experience of analysis of high resolution remote sensing data
- Ability to lead complex analytical projects, ideally with an applied knowledge of agile
- Ability to mentor a young and highly motivated team and identify new talent
- PhD in highly numerate discipline, or four years of post masters research
- Strong communications skills and ability to convey technical knowledge and ideas to non-expert clients

About the Data Lab and Current Projects

Kimetrica's Data Lab is specialized in drawing clear messages for decision-makers through modeling of large and complex datasheets

Our team of data scientists, GIS experts and subject matter specialists develop tools to inform policy decisions. Our work ranges from modeling social impacts of climate risk to sophisticated, deep learning algorithms for malnutrition detection.

We strive to make our analyses accessible to wide audiences through data visualizations and interactive websites. We apply the latest academic research and statistical methods to support decision-making in organizations that seek an impact, not just bottom line profitability.

MERON

In response to a need for accurate, cost-effective and rapid diagnosis of the nutritional status of children under five, in different field settings, Data Lab is testing a Method for Extremely Rapid Observation of Nutritional Status (MERON). It uses facial recognition technology and machine learning to rapidly capture and analyze a photograph of the child's face to generate a weight for height Z score and malnutrition category. MERON was presented at the Artificial Intelligence for Good Global Summit held in Geneva in May 2018 and has featured in the Smithsonian, New Scientist and Deutsche Welle.

World Modelers

Using South Sudan as a case study, Kimetrica is developing parameterized quantitative models to generate key output variables for population, conflict, household economics, water, markets, health, and humanitarian operational response that impact food security.

These models will serve as inputs into an iterative process of developing scenario-based decision-support tools, which will, over the course of this research, evolve into a Web-based interactive tool. It will allow decision makers to construct plausible scenarios - spatially and temporally defined by the user - and experience how a range of response options may mitigate food insecurity.

Salary and Benefits

Salary is commensurate with the candidate's capabilities and experience.

At Kimetrica, you will work alongside innovative thinkers at the forefront of developing new methods and technologies for humanitarian and development decision making. You will find a place where you can apply your skills to address some of the world's most challenging problems, in an environment where intellectual curiosity forms a common thread among our technical and management teams. We offer the following:

- Highly competitive salary package
- Health, Dental, Vision and Life insurance
- Generous vacation (24 days per year), holiday, and sick leave
- 401K match
- Friendly and stimulating working environment
- Major opportunities for career growth and on-the-job learning

Interested candidates should send a CV and cover letter with salary requirements to andrew.pasini@kimetrica.com. Please include in the subject line of your email "Lead Data Scientist." Only shortlisted candidates will be contacted.

About Kimetrica

Kimetrica was established in 2006 by a group of former humanitarian workers with extensive experience in monitoring and evaluation, training and capacity development. To ensure global orientation, our management, technical, and administrative teams are multi-cultural and include staff and consultants from all over the world. Our ability to mobilize staff quickly is enabled by Kimetrica's permanent offices in the US, Kenya, and Ethiopia, as well as the location of long-term core staff members in the Middle East, the United Kingdom, Bangladesh, and Mongolia. While Kimetrica is a small company, we bring a wealth of experience managing multi-country efforts in challenging operational environments all over the world. Everywhere we work, Kimetrica is able to mobilize staff quickly and provide high-quality technical and operational support to projects.