Title	**Yield Crop Modeller**
Division	**Research - Commodities**
Location	**Geneva, Switzerland**
Starting date	**ASAP**
Remuneration	**Competitive according to experience**

Vacancy - Yield Crop modeller position description

Our company

Engelhart Commodities Trading Partners (formerly known as BTG Pactual Commodities) was established in 2013 and has since developed into a global commodity merchant, with a presence in all the major global commodities hubs.

The Agricultural Commodities Research team is responsible for conducting research projects, coordinating the gathering and the processing of the data in order to feed traders with recommendation and trading views, covering a wide range of agricultural commodities. Currently formed by multicultural and multidisciplinary members ranging from economist, engineers, agronomist, meteorologist… distributed in several offices around the world.

Candidate will report to Senior Crop Production analyst and will have the opportunity to applied scientific results into the dynamic sector of commodities trading. It is an exciting opportunity to work applying nowadays trending technologies for yield modelling, involving large amount of data sets from weather, economics to satellite information.

What You Will Do

Design, build and validate statistical crop models that based on diverse datasets (including weather dataset and satellite dataset) to provide new insights for crop yield forecasting. Collaborate with engineers to deploy successful models and algorithms into production environments. Build research pipelines and algorithms to derive valuable insights from current and new datasets. Develop reporting tools for communication.

Requirements

- PhD (close completion) / MSc (preferably in meteorology/agronomy or related)
- Experience on crop yield modelling and managing large datasets
- Strong programming skills. Proficient in R or Python. Knowing cloud infrastructure is a plus
- The practical experience in applying deep learning and fundamental machine learning algorithms (supervised, semi-supervised, and unsupervised learning) to solve complex problems. Experience with spatial statistics.
- Familiar with different crop models (DSSAT, EPIC, WOFOST, The Hybrid-Maize,etc)
- Familiar with the basic crop physiology
- Comfortable with handling database.
- Familiar with meteorological reanalysis dataset (NLDAS, GLDAS, GFS, etc)

- Familiar with satellite products (MODIS, Sentinel, SMAP)
- Knowing ArcGIS, QGIS or ENVI is a plus.
- Professional proficiency in English is mandatory, others languages are an asset (preferred: French, Spanish and Portuguese)
- Strong communication skills with the ability to explain detailed technical information in a clear and concise manner, to a variety of audience
- Flexible and very dynamic with good interpersonal skills

Possible evolutions of the position

- Expand to other crops like coffee or cotton.
- Weather prediction monitoring
- Price modelling based on weather information

What we offer

- Competitive salary.
- Superb medical, life, disability benefits, and pension contribution.
- Relocation package.

Contact:

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