Applied mathematician - Modeler in Agronomy (open to all applicants)

Joining itk

Joining itk means:

- **Taking special pride in serving the users of our applications** - you'll be participating in the development of decision-making web tools appreciated by technicians and farmers alike for meeting their needs.

- **Working within a team setting** - collective emulation is one of itk's founding principles. In addition to team-based strategy-building sessions and the agile meetings (scrum), knowledge and best practices are regularly being disseminated to all modeling staff. Interactions with the firm's computer specialists make it possible to implement the most effective scientific coding methods.

- **Witnessing a tool's development** - you'll observe all the stages involved in creating a tool, from initial contacts with clients and partners to their widespread use throughout the world.

- **Enjoying the sharing of knowledge** - within a rich and diverse, people-oriented environment, you'll be asked to explain your craft while encountering different visions of your role.

- **Applying your scientific competences to innovative project specifications** – bridging the cutting-edge knowledge acquired through research with farming practices, and establishing a dialogue between distant spheres of activity will be the core of your day-to-day missions.

- **Giving meaning to your profession** - our purpose is to develop innovative decision-making tools to assist agricultural industry actors manage their crop production more sustainably.

Your missions

You'll be part of a team of talented modelers and agronomists working to develop cropping system models, intended to be incorporated into decision-making tools used by farmers across the globe. As a core member of this team, in which group synergy is on full display through an agile organization, you'll be asked to:

- Contribute and share your knowledge of implementing modeling methods
- Process and analyze observed data, evaluate models, perform sensitivity analyses, estimate parameters
- Set up and use tools of **data assimilation**. The data can be issued from remote sensing and will be assimilated into the crop models
- Interface with computer scientists assigned to associate web tools with the models.
- Participate in the industrialization of scientific code development, which entails: continuous integration, code-sharing among projects, modularity, computation time problem resolution.
- Contribute to model design with your colleagues specialized in agronomy and ecophysiology: analyze and grasp the agronomic problems faced by field actors, working in support of your
project’s product owner, compile a scientific and technical bibliography to facilitate designing
the best response to these problems, select the equations to introduce into the model,
implement them using a scientific language and fully test the resulting model (evaluation,
calibration, sensitivity analysis, etc.).

Agronomic modeling team members may split their time with teaching assignments and regularly
attend scientific conferences, professional seminars as well as the Agile Tour Montpellier trade
show.

Who are we looking for?

- **Having earned a Ph.D. and/or engineering degree in applied mathematics or statistics**, your
  previous experience has proven successful in applying mathematical methods to another
  scientific discipline
- You're proficient in the methods related to modeling (sensitivity analysis, model evaluation,
  parametric estimation, data assimilation, data processing).
- You regularly propose new practices and possess the requisite qualities to win their
  acceptance among team members.
- You have proficiency with at least one of the following scientific programming languages:
  Matlab, Python, R or languages of the type Java or C++; also, you love to program.
- Even though you may not be familiar with agronomy, this field still peaks your curiosity.
- As someone who's curious about issues in both the scientific and human realms, you
demonstrate rigor, autonomy and clarity when performing your assigned missions.
- Displaying outstanding people skills, you derive great satisfaction working with a team in
  your field of expertise as well as with our professions.
- You're comfortable working in English.

Who is itk?

As an innovative firm enjoying rapid growth, our software products utilize the knowledge generated
from up-to-date agronomic research in order to propose field-tested tools capable of addressing the
tremendous challenges ahead in moving towards sustainable agriculture.

Our projects and teams are dedicated to three main fields: agronomic modeling, computing and
ergonomics, which merge to create a vibrant technological hub. In capitalizing on these three skill
sets and team talents, our firm with its current 50+ workforce is highly reputed for high-quality tools
and services and moreover is now pursuing its growth in the international arena.

Get ready for an exciting adventure, as part of a good-natured team within a pleasant working
environment near Montpellier (Cap Alpha in Clapiers), offering: schedule flexibility, personal leave
days, an on-site company restaurant.
Practical considerations

- Professional status with a permanent employment contract, position based in the Montpellier area (Clapiers)
- Starting date: post available immediately.
- Salary: depending on the successful candidate's profile
- Recruitment process: subsequent to an initial interview held with future team members, you'll meet senior management and the Head of Human Resources.

In compliance with company policy regarding diversity and with legal requirements, itk welcomes applications from individuals with disabilities.