Position Overview:

The Climate Corporation is looking for an experienced statistician to work with an interdisciplinary team of scientists to build models that help farmers manage their fertilizer use. These models are the foundation of our cutting-edge digital product, Nitrogen Advisor, helping guide farmers’ decision-making around fertilizer applications to balance both sufficiency and efficiency. Our ultimate goal is to provide recommendations that will enhance farm profitability worldwide while being better environmental stewards to their land, and serve as a central component of the company’s overall business model.

The Soil and Crop Processes team consists of scientists across multiple fields including hydrology, biogeochemistry, crop modeling, engineering, and statistics. We are looking for a statistical scientist who can lead the statistics group, provide guidance to researchers, and drive the statistical vision forward to best incorporate statistical talents into the development of the product.

The statistical group is small but diverse, working on problems including:

- Scalable, multivariate spatio-temporal statistical models that incorporate the strengths of process models into the statistical context where uncertainties can be fully quantified and field data fully utilized.
- The design and evaluation of field experiments and sampling protocols in order to produce soil and yield data that are maximally useful to the improvement of our models.
- The development of mechanistically-motivated statistical models that can provide prescriptive insights to farmers.
- The utilization of field data to improve process models through data assimilation and calibration.

What You Will Do:

- Oversee a small team of researchers, helping them to develop and execute on their research programs, while providing opportunities for career development.
- Collaborate with an interdisciplinary team of software engineers and scientists, to develop cutting-edge, scalable statistical algorithms and apply these algorithms to real-world data for market-facing products and services.
- Engage with diverse research groups to understand their models, products, and data needs and provide strategic advice on their research roadmaps.
- Clearly communicate results to stakeholders in various parts of the organization, including field research, data science, strategy, marketing, sales, and product.

Basic Qualifications:

- Ph.D. in statistics or an equivalent quantitative discipline
Functional experience (eight years including Ph.D.) in statistical computing for real-world data sets using programming languages such as R, Python, or Julia

Experience (eight years including Ph.D.) in spatio-temporal modeling, Bayesian statistics, data assimilation, computer experiments, computational statistics, experimental design, and/or machine learning

Preferred Qualifications:

- Experience leading a small team of data scientist researchers
- Strong drive to learn new topics and skills and to develop innovative products for our customers
- Ability to communicate and collaborate as a member of an agile, high-performing team
- Experience with application of statistics to environmental or agricultural problems, particularly those involved process-based deterministic models (e.g. global climate models, crop models, etc.)
- Functional experience (ten years including Ph.D.) in statistical computing for real-world data sets using programming languages such as R, Python, or Julia
- Experience (ten years including Ph.D.) in spatio-temporal modeling, Bayesian statistics, data assimilation, computer experiments, computational statistics, experimental design, and/or machine learning