Job Opportunity: Quantitative Genetics and Computational Biology

At **Heritable Ag**, we're building next-generation tools for data-driven plant breeding and improvement. We combine cutting-edge statistical modeling, AI/ML, and domain expertise to advance agriculture with smarter, faster decisions. We're looking for a **Project Data Scientist** to join our dynamic team. In this role, you'll help develop and implement cutting-edge AI solutions in quantitative genetics, computational biology, and high-performance computing environments.

Responsibilities

You will work directly with internal and external customers teams, engaging closely with clients to understand the unique characteristics and challenges of their data and results objectives. Leveraging our proprietary tools and methodologies, you will tailor analytical solutions to meet specific customer needs, ensuring that our solutions are both scientifically robust and practically valuable. Your tasks will require genetic data analysis, environmental inference, advanced computer programming and a collaborative attitude. Your core work will involve transcriptome-enabled gene discovery, genotype-by-environment prediction, and familiarity with plant breeding principles. This will include:

- Obtaining an intimate familiarity with our gene-discovery approaches and the application of the approach to new datasets across the plant kingdom.
- Obtaining an intimate familiarity with our genotype-by-environment prediction algorithms and the application of these algorithms to new datasets across the plant kingdom.
- Attention to detail: You will be responsible for making sure the input data are consistent with model requirements, that the algorithms run properly, and for the accuracy of results returned to customers and their actionable visualization.

This is an exciting opportunity to contribute to research that directly supports better, faster, and more cost-effective workflows for plant improvement and optimization.

Additional Projects/Tasks May Include:

- Contribute to the development and evaluation of advanced ML methodologies related to our prediction interface
- Contribute to the development and evaluation of advanced ML methodologies for gene/trait discovery
- Support the automation of pipelines optimized for our infrastructure
- Monitor recent research developments focused on developing and verifying new data analytics solutions

Your Profile:

- You have completed a PhD in a relevant field (e.g. plant breeding, quantitative genetics, biostatistics, data science, etc), or will complete your PhD before starting
- Ideally, you have experiencing working with agricultural and/or polyploid plant species
- You are available to work on-site from our offices in San Carlos, California
- You have a proven and demonstrable record of valuing, promoting, and advancing an inclusive and diverse work environment
- You have a strong interest in data analysis, with experience working on large and complex datasets
- You are proficient in statistical programming (Python and/or R)
- You are experienced with corporate HPC environments such as Google Cloud Platform, AWS, or Microsoft Azure.
- You have strong problem-solving skills and a collaborative mindset
- You have clear and effective communication skills

This full-time position offers the chance to work with a passionate, interdisciplinary team and contribute to powerful work on our internal and external projects. You'll gain hands-on experience with data that drive decision-making in modern plant breeding and genomic applications.

Ready to apply or want to learn more? We'd love to hear from you!

Please send your application or any questions to:

Email: [project-data-scientist-2025@heritable.ag]