# JOB DESCRIPTION

**Position:** Applications Developer  
**Department:** Research  
**Reports to:** Lead Scientist, Perennial Legumes  
**Supervises:** None  
**Status:** Exempt  
**Location:** Salina, KS

---

**About The Land Institute:**
The Land Institute co-leads the global movement for perennial, diverse, truly regenerative agriculture at a scale that matches the enormity of the intertwined climate, water, and food security crises. The Land Institute’s work, led by a team of plant breeders and ecologists in multiple partnerships worldwide, is focused on developing perennial grains, pulses and oilseed bearing plants to be grown in ecologically intensified, diverse crop mixtures known as perennial polycultures. The Institute’s goal is to create an agriculture system that mimics natural systems in order to produce ample food and reduce or eliminate the negative impacts of agriculture. Through transdisciplinary research and collaborations, we build learning communities to help society cross the threshold into diverse, perennial grain agricultures.

**Position Summary:**
We seek an Applications Developer to join our staff at The Land Institute to develop and implement breeding and agronomic data management systems that enhance the capacity for our research staff and our global network of collaborators to create perennial grain crops and cropping systems. The successful applicant will become part of a highly collaborative, multidisciplinary team with a strong shared mission to improve humanity’s long-term food security and planetary ecosystem services. Open-source tools and platforms have already been built for public and private breeding and agronomic research efforts in major commodity crops. This project leverages those software development efforts to create a cloud-deployed, easy-to-use genetic, phenotypic, agronomic, and environmental data management system that includes databases and analysis/decision support tools for perennial grains breeders and agronomists working in monoculture and intercropping systems. This position can be remote.

**Responsibilities:**
- Design, build, and improve programs, tools, or systems that make up the breeding and agronomy data management system
- Implement and test code for robustness, usability, and reliability while gathering feedback from The Land Institute researchers and research collaborators for further customization and improvement.
- Rapidly fix bugs and solve new programming and conceptual problems.
- Design and develop approaches for managing and analyzing breeding and agronomy data from perennial grain and perennial polyculture (intercropping) systems.
- Assist researchers and staff at The Land Institute in fully integrating tools and algorithmic solutions into research programs.
- Collaborate with software development teams at other institutions to co-develop features that are beneficial for public researchers, breeders, and civic scientists globally

**Competencies:**
- **Mission Driven:** You are passionate about the mission of The Land Institute to create a diverse, perennial grain
agroecosystem that feeds humanity and are interested in aligning your skills and personal genius to benefit this work.

- **Creative Problem Solver**: You excel at strategic thinking, being open to new perspectives and better ways to do things; you are creative, visionary and manage innovation well. You are interested in serving the organizations needs by developing, through a consultative and collaborative approach, novel solutions to organizational challenges.

- **Courage**: You do not retreat or shy away from hard things. You face challenges and conflict with professionalism, grace, and resolve.

- **Inspiring and Inspired**: You are inspired by the people around you, finding and harnessing the genius in your colleagues to meet organizational objective, and you are inspiring to others through example and your own genius applied.

- **Collaborative**: You are a team player first and believe in the power of a diverse collective to solve problems.

- **Growth Mindset**: You have the vulnerability to know what you don’t know, admit your flaws, and learn from others to grow and develop yourself and the organization.

- **Sense of Humor**: You have a great depth of knowledge in your area of expertise, but don’t take yourself or the world too seriously. You focus on the positive and find humor and awe in every day.

**Position Requirements:**

- Bachelor’s degree in computer science or related field
- 3+ years experience in software development
- Fluency in dev tools (e.g., version control, continuous integration and delivery, scrum)
- Experience with Java and/or Python programming languages
- Ability to annotate code, document daily progress, and write reports in professional English.
- Ability to communicate with plant breeders, agronomists, and other researchers about design needs.

**Environmental and Working Conditions:**

- Prolonged periods of sitting at a desk and working on a computer and phone.

**Compensation and Benefits:**

The Land Institute offers an excellent benefits package and a competitive salary that is commensurate with experience. The salary range for this position is $60-70k annually.

The above statements are not an exhaustive list of job duties and responsibilities of this position at The Land Institute. They only reflect the general duties and responsibilities necessary to describe the principal functions of the job. Responsibilities of the position are subject to change as determined necessary.

The Land Institute is an equal opportunity employer and embraces the opportunity to provide employment to qualified individuals regardless of race, color, religion, sex (including pregnancy, gender identity, and sexual orientation), national origin, age (40 or older), disability or genetic information. We are pleased to provide reasonable accommodations to enable individuals with disabilities to perform the essential functions.

**Understanding and Agreement:**

I understand and agree to perform my job as best I can and commit to moving the mission of The Land Institute forward. I realize this written position description is designed to give me a summary of the major duties and responsibilities of my position. I may be asked to perform other position-related tasks that may not be specifically mentioned in this description.
I understand that The Land Institute is dedicated to a culture where ethical considerations are part of making decisions by all employees. This includes following federal and state laws and regulations and company policies and procedures. I know that if I become aware of any issues during my employment that seem questionable to me, I must report them so they may be reviewed and investigated.

I also understand that my position description is to be used as a guide for conduct in the employment setting and is not a contract or offer of a contract of employment terms. The Land Institute is an employment-at-will agency.

____________________________________________________________
Employee Signature  Print Employee Name  Date

____________________________________________________________
Supervisor/HR Signature  Print Supervisor Name  Date