**Seeking Experienced Engineer with 3+ years of experience** for opportunities in the Waterloo/Cedar Falls, IA area to design and build custom machinery, prototypes, and/or design and implement robotic applications for a wide range of industries based on the requirements and skills outlined below.

US Citizen or Permanent Resident/Green Card Holder required

# **Job Description**

As an Engineer you will be responsible for developing portions of, or complete designs, of mechanical systems and prototypes machines. Precision machine design starts with understanding the functional requirements and deriving specifications.

You will:

- work on sub-systems involving robotics, custom machines, and/or precision mechanics.
- consider kinematics, dynamics, material properties, and structural, dynamic, and thermal analysis.
- collaborate with other engineers and designers in a multidiscipline project team to:
  - o develop concepts
  - o generate detail CAD designs
  - o perform engineering analysis
  - o create engineering drawings
  - o partner with suppliers
  - build and test prototypes
  - o **testing**
  - system integration support

There will be a strong emphasis on project management and direct customer interaction. Must be able to deliver a project to customers with minimal supervision on time and within budget.

# Job Requirements

We are seeking individual(s) with a strong background in mechanical design and engineering, including taking responsibility of the complete design and build cycle. A background in mechanical design of custom machines, precision design, or complex optical systems is desirable, as well as good complex mechanical system intuition.

## **Other requirements:**

- > 3+ years experience in Mechanical Engineering and/or design work or similar
- Proficiency with 3D CAD software such as Inventor, SolidWorks, and/or Pro-E for design conceptualization and realization.

- Basic experience with mechanical analytical techniques, including Finite Element Analysis (FEA) such as stress / strain / deformation, modal response, etc.
- Demonstrated ability to derive conclusions from analysis and make practical recommendations.
- Mechanical design exposure to kinematics, dynamics, material properties, and behavior and structural analysis.
- Exposure to projects involved in Robotics, Custom Machine Design, PLC Programming, Mechatronics, and/or Optical Systems a definite plus.
- > Strong technical writing, communication, and presentation skills.
- > Good understanding of machine design.
- > Experience with Microsoft Word, Excel, and Outlook.
- > Knowledge of PLC and/or robotic programming.
- > Good written and verbal communication skills.
- > Ability to work in collaboration groups or alone on projects.
- > Ability to assemble and test what was designed and built.
- > Self-starter.
- > Mechanical background.
- > Able to work 40+ hours per week.
- > Some travel required, usually less than 10%.

### Personal skills

- Ability to interface with multidisciplinary groups including senior leadership or management.
- > High energy self-motivated team player with strong desire to learn.
- Customer oriented and willing to work with high level problem solvers on a daily basis.
- Possess strong leadership and ownership characteristics with commitment to achieve results on time and within budget.
- > Potential to develop into a technical leader in the organization.

#### Education

### A 4 year or advanced degree from an accredited college or university in Mechanical or Agricultural Engineering is a plus with 3+ years experience

## Seeking

Needing one engineers for custom machines, prototypes, and/or precision engineering type work based on the requirements and expectations outlined above.