

# Mechanical Engineer



Would you like to join an awesome and quickly growing team that is deploying exciting agricultural technology across the USA?

## About The Company:

- Rogo is an Ag-Tech company that helps farmers apply fertilizer more efficiently. To do that, we build and operate **autonomous robots** that have collected over 100K acres of soil samples within the past year.
- Meet our quickly growing team at <https://www.rogoag.com/team> that is headquartered in West Lafayette, IN.
- Our team respects each other deeply, while at the same debating ideas fiercely to get to the best solution. At Rogo, a growth mindset >> knowledge and real results >> effort.
- Join us on our path to improve both Precision Agriculture and the peoples' lives we touch along the way (including our own team).

## Job Description

### Role:

- Goal: Improve robot's durability, safety, efficiency, and usability with a variety of projects
- Identify problems, solve them, design solutions, build them, test them, repeat.
- Work independently but tackle big challenges with collaboration
- Convert projects into weekly goals and produce progress every week
- Mix of office research & design with hands-on build and testing.

### Examples of Potential Projects:

- Lighter, more durable soil extraction arm
- Soil conveyance - comparing pneumatic vs mechanical & optimizing
- Lighter, faster packager gripper system
- Robot enclosure & weatherproofing
- Design for operator ergonomics
- New and custom soil sampling robot vehicle

## Desired Profile

### Minimum:

- Great communicator, problem definer and solver, core values fit
- Breakdown problems with physics, trig, calculus & algebra
- Test design & execution, sometimes in the outdoor elements
- Data analysis & presentation in a modern tool (excel, matlab, sheets etc)

### Core Skills:

- Modeling: 3D CAD, 2D Fabrication drawings (with tolerancing)
- Layout/Machine Design: assemblies, interferences, configurations
- Wiring Design: routing, harness, termination, mounting
- Simulation: static and dynamic FEA analysis

- Design for Mfg. & Maintenance: easy to build & maintain
- Design for Ruggedization: vibration- & water/weather-proofing
- Fabrication: Willing (if not able) to build things in the shop - welding, cutting, wrenching

Core Experience:

- Projects: Robotics/machine design, rugged design, vehicular design, packaging
- Systems: pneumatic, electrical/control, hydraulic systems, linear motion systems
- Materials: steel, aluminum, weldments, 3d-printed plastics

Bonus:

- Electrical Schematic Design, Low level programming (Ladder Logic, PID)

**Start Date & Location**

- Start in May 2020
- Willing to work in Wolcott, IN / Lafayette, Indiana area

**Compensation / Benefits**

- Full-Time Salary (based on market, experience, & skill)
- PTO - Flexible Vacation Plan (Self-managed as long as you get your work done)

**Why apply?**

- Work with exciting Ag-technology for a purpose.
- Work with an amazing, quickly growing team.
- Challenge yourself to grow in many different areas.

**Interested?** Please go here for the application form: <https://www.rogoag.com/join-our-team>