



## Czero, Inc

### Job Opening – Mechanical Engineer

Posting#: 2019-003

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**Date of posting:** January 23, 2019

**Location:** Fort Collins, Colorado 80524

**Time commitment:** Full time

**Reporting structure:** Reports directly to the VP of Engineering

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#### JOB DESCRIPTION

Czero will add to our team an experienced Mechanical Engineer/Designer with both the CAD and analytical skills required to take a project from start to finish. You will work in a team environment supporting research and development projects in advanced automotive, oil and gas, clean energy, aerospace, transportation, and other industries.

At Czero we work on a wide variety of projects, for companies large and small, innovating new, and further developing existing mechanical, electromechanical, and electrohydraulic systems and subsystems. We specialize in the engineering, design and development of first and second stage prototype systems, using our skills to deliver innovative and efficient solutions to our customers. In a given day, our projects may include powertrain systems, mobile and industrial hydraulics, large scale system integration, and packaging of precision laboratory instrumentation, to name a few. If you join us, you will work hard, play hard, and as a member of the team, strive to bring the best to every project, building fully satisfied customers through delivery excellence.

#### QUALIFICATIONS

##### Education

Bachelor's degree in Mechanical Engineering or equivalent experience (advanced degree preferred)

##### Experience required

Minimum of 3 years' experience using solid modeling/CAD tools for design, with the majority of time spent applying CAD tools during that period.

##### Essential capabilities

- Proven ability to develop new concepts and designs to solve R&D challenges
- Demonstrated capability to create designs using SolidWorks, Autodesk Inventor, PTC Creo
- Perform analysis as part of the design process using spreadsheets, Mathcad, or similar programs (i.e. fatigue, buckling, peak stress, system hydraulic flow/pressure calculation, actuator/pump/motor sizing, spring/gear/spline design, etc.)

- Perform tolerance stack-ups using GD&T methods to make production-ready prints
- Make assembly prints and complete BOMs
- Work with the team to evaluate concepts and conduct design reviews
- Work with the team on FMEA's and documentation
- Write specifications for purchased components
- Work with vendors and experts on component selection
- Meet with clients, vendors, and partners
- Document design activities

### **Additional consideration given to those with experience in these areas**

- Analysis capabilities: FEA, CFD, dynamic modeling, MATLAB, Simulink
- Experience with material and coating selection
- Document control and PDM experience
- Automotive powertrain engineering/design
- Engineering for oil & gas applications
- Hydraulic systems, including industrial hydraulics and high-bandwidth systems such as fuel injectors, high-speed valves, etc.
- Process piping (ASME 31.1 & 31.3)
- Compressors/pumps

### **Residency requirements**

- U.S. citizenship or the ability to satisfy U.S. Department of Justice work requirements without assistance from Czero

### **The right fit for our team**

Beyond technical ability, we're looking for someone who is smart, creative, innovative, hardworking, able to handle multiple projects at a time, and tenacious when it comes to a tough challenge. Everyone at Czero enjoys the challenge of tackling hard problems and is willing to put in the time and effort to solve them. Additionally, we have a true team environment, so it's crucial that you can collaborate effectively with diverse team members.

### **HOW TO APPLY**

Please email a PDF of your cover letter and résumé to [careers@czero-solutions.com](mailto:careers@czero-solutions.com)

### **ABOUT CZERO**

An established, fast-growing mechanical engineering firm located in Fort Collins, CO, Czero specializes in early-stage R&D in the areas of automotive, commercial vehicles, oil and gas, and clean technologies for local and global companies. Our team takes on wide-ranging engineering challenges for both private and public sector clients, developing new technologies and delivering high quality proof-of-concept prototype systems. We are passionate about the environment, and our work centers on scalable, cost-effective solutions to increase energy efficiency, improve energy storage and delivery, and decrease harmful emissions. Czero has a strong network of partner companies, suppliers, and university collaboration partners, including the Colorado State University (CSU) Energy Institute, often working with university researchers on cutting edge technology development. If you join our team, you will find Czero an interesting, challenging, and rewarding place to work. Your

contributions will make a significant impact on high-profile projects that are positive for our clients, the environment, and the economy.

## **RECRUITERS**

Please do not contact us regarding this or other positions at Czero; we already have an established relationship with a great recruiting team. Thanks!