



Czero

Contract Position Opening – Mechanical Engineer/Designer

Posting#: 2016-009

Date of posting: November 23, 2016

Location: Fort Collins, Colorado 80524

Time commitment: Contractor Basis

Reporting structure: Reports directly to the VP of Engineering

JOB DESCRIPTION

We are looking for experienced Mechanical Engineers/Designers with the CAD and analytical skills required to take projects from start to finish. On our team, you will work in a highly collaborative environment, supporting research and development projects in automotive engineering, oil and gas, and clean technologies. At Czero we work on a wide variety of projects, for companies large and small, both developing technology innovations and advancing existing mechanical, electromechanical, and electrohydraulic systems and subsystems. We specialize in the engineering, design and development of first- and second-stage prototype systems. On a given day, our projects may include high-efficiency powertrain systems, mobile and industrial hydraulics, large scale system integration, and packaging of precision laboratory instrumentation, to name a few. We equip our team with today's best tools for the top-of-the-line, industry-leading work we do for our clients.

This posting is specifically for contract engineers that can assist Czero from time to time as needed.

Representative tasks

- Develop new concepts and designs to solve R&D challenges
- 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.)
- Create solid models using SolidWorks (preferred) or Autodesk Inventor
- Perform tolerance stack-ups using GD&T methods to make production-ready prints of designs
- 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

QUALIFICATIONS

Education

Bachelor's degree in mechanical engineering (advanced degree preferred)

Experience required

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

Essential for this position

- Work every day with internal and external teams to scope the problem and develop solutions; working well as a team member is essential
- Strong and effective verbal and written communications for interpersonal interactions
- Strong engineering and analytical skills
- Ability to innovate and deliver on projects that are often nebulous and ill-defined
- Be equally comfortable with a “napkin sketch” or a fully defined specification
- Thorough and up-to-date understanding and experience using CAD software and GD&T
- Understanding of manufacturing processes and capabilities
- Commitment to Czero’s goals and a desire for continuous improvement

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

- Must be U.S. citizen

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

ABOUT CZERO

An established, fast-growing mechanical engineering firm located in Fort Collins, Colorado, Czero specializes in early-stage R&D in the areas of automotive, commercial vehicles, oil and gas, and clean technologies. 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 decrease harmful emissions. Co-located at the Powerhouse Energy Campus of the Colorado State University (CSU) Energy Institute, we also work closely with CSU researchers.

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!