



## Czero, Inc.

### Job Opening – MATLAB Simulink Dynamic Systems Modeling Engineer

Posting#: 2020-008

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**Date of posting:** February 24, 2020

**Location:** Fort Collins, Colorado 80524

**Residency Requirement:** U.S. Citizen

**Time commitment:** Full time

**Reporting structure:** Reports to Lead Controls Engineer

**Travel requirements:** Possible occasional travel for onsite work with clients

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#### QUALIFICATIONS

##### Education

Master's degree in Mechanical, Electrical, or Aerospace Engineering, Physics or closely related field (Minimum Requirement, PhD's also encouraged to apply).

##### Experience required

Minimum of 3 years' experience applying advanced analytical techniques to solve tough engineering problems, preferably in a multidisciplinary research and development environment.

##### Residency requirements

U.S. Citizen (Green card and visa's not acceptable due to work for DoD)

##### Essential for this position

- Dynamic system modeling with MATLAB/Simulink scripting
- Strong analytical skills
- Attention to detail
- Ability to perform complex trade studies to inform system architecture design
- New concept development and first-pass evaluation in support of concept selection
- Data analysis, reduction, and visualization using MATLAB, Excel and other programs
- Writing reports, document analysis activities, and communicate with clients
- Attending client meetings either in person or via technology
- Traveling to customer sites as needed

## JOB DESCRIPTION

Czero will add to our team another experienced Dynamic Systems Modeling Engineer with fundamental engineering and analytical skills required to perform in depth simulation and analysis on a relatively wide variety of energy related projects. You will work in a team environment supporting research and development projects in advanced automotive/transportation, oil and gas, clean energy, aerospace, 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 automotive 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.

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

- Thermal modeling
- Compressible flow modeling
- Dynamic system modeling with GT-Suite and LMS Amesim
- FEA analysis
- CFD analysis
- Hydraulic systems modeling and design, especially high-bandwidth systems such as fuel injectors, high-speed valves, etc.
- Control system and algorithm development
- AI & Machine learning experience
- Combustion modeling
- Mechanical and electrical assembly and testing
- Automotive powertrain engineering/design
- Project Management

### 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 clean energy, 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!