Czero, Inc.

Job Opening – Dynamic Systems Modeling Engineer

Posting#: 2026-001

Date of posting: February 13th, 2026

Location: Remote or In-person (Fort Collins, Colorado)

Residency Requirement: U.S. Citizen, Green Card Holder

Time commitment: Full time (Individuals interested in working on a contract basis may also be considered)

Reporting structure: Reports to Modeling and Simulation Group Team Lead

Travel requirements: Possible occasional travel for onsite work with clients

Pay Range: $110,000 - $160,000

QUALIFICATIONS

Education

Master's degree (or PhD) in Mechanical, Process, or Chemical Engineering, Physics or closely related field with relevant work experience.

Experience required

Minimum of 10 years of experience in an industry setting applying advanced analytical techniques to solve tough engineering problems, ideally in a multidisciplinary research and development environment.

Residency requirements

U.S. Citizen, Green Card Holder (Visa's not acceptable due to DoD work)

Essential for this position

- Real-world experience with analyzing mechanical and ideally chemical processing systems
- Dynamic system modeling (especially with MATLAB Simulink)
- Perform complex architectural and trade studies to inform system design
- Quickly integrate and access novel technologies in early stages of development
- Develop and expand on client's core concepts to advance their technology
- Develop new concepts and perform first-pass evaluation in support of concept selection
- Data analysis, reduction, and visualization using MATLAB, Excel and other programs
- Strong analytical and critical thinking skills and attention to detail
- Writing reports, document analysis activities, and communicating with clients

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 wide variety of energy related projects. You will work in a team environment supporting research and development projects in advanced clean energy, chemical processing, automotive/transportation, 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, chemical, and process systems and subsystems. We specialize in engineering, design, and development of first and second stage prototype systems, using our skills to deliver innovative and efficient solutions to our customers. At any point in time, our projects may include novel clean energy technologies, chemical processing, automotive powertrain systems, mobile and industrial hydraulics, and large scale system integration, to name a few. If you join us, you will work on innovative and challenging technologies, and as a member of the team strive to bring the best to every project, building fully satisfied customers through delivery excellence.

The candidate will be expected to routinely solve transient and steady-state problems with minimal guidance involving (among many others):

- Heat and mass balances for systems with:
  - Power generation equipment: Fuel cells, compressors, gas turbines, steam generators, heat exchangers, etc.
  - Phase change: Boilers, evaporators, condensers, etc.
  - Reacting flow: Chemical, electrochemical, photochemical, redox reactions
- Thermodynamic cycles
  - Gas turbine cycles
  - Steam and ORC cycles
  - Refrigeration cycles
  - Internal combustion engine cycles
- Fluid dynamics
  - Incompressible flow
  - Compressible flow of real gases.
  - Hydraulics (slightly compressible flow)
- Heat transfer
- Solid mechanics and solid dynamics
- Chemistry

Additional consideration given to those with experience in these areas

- Ability to develop process flow diagrams
- Chemical modeling
- COMSOL Multiphysics modeling
- Thermal modeling
- Compressible flow modeling
- FEA analysis
- CFD analysis
- AI & Machine learning experience
- Rigid body dynamics modeling

- Control system and algorithm development
- 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

ABOUT CZERO

An established, 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 complex system integration for wide variety of industries 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 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 universities and national laboratory collaborators, partner companies, and suppliers, often working with researchers and startups 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!