

# Applied Dynamics Engineer (Early Career)

Full-Time - Rapid City, SD, USA

## Job Details

Applied Research Associates, Inc. (ARA) is looking for an early career applied dynamics engineer to join our team in the Black Hills Office. As part of our Concept Development team in Rapid City, SD you will support our growing business in the area of physics-based modeling and simulation on a diverse range of phenomena including structural response to high speed, dynamic impact events and constitutive model development.

Your day-to-day work will consist of finite element mesh development, simulation based design, and creative problem solving using finite element methods. Customer focused analysis is a core competency of our team, so you will be relied upon to provide meaningful simulations to answer a variety of highly complex weapons issues. In addition, you will analyze your results and collaborate with a team to ensure we provide the high level of technical quality that our customers have come to expect. You will be part of a dynamic, multi-disciplinary team-based environment to solve problems and provide customer support.

## Required Qualifications

- Bachelor of Science in Mechanical Engineering or related field
- Unix/Linux/Windows Operating Systems experience
- Finite Element Analysis (FEA) or Finite Element Methods (FEM) experience
- Solid Modeling (SolidWorks, ProE, etc.) experience
- Ability to obtain a security clearance, which includes US citizenship

## Preferred Qualifications

- Master of Science or better in Mechanical Engineering or related field
- Practical application of FEA to solve hard structural dynamic problems including contact, nonlinear material behavior and fracture with LS-DYNA, ABAQUS, or EPIC
- Experience with Explosives or Propellants
- Material model development with non-linear visco-elastic solids
- Secret clearance in the last 5 years
- Solid Modeling (SolidWorks, ProE, etc.)
- Meshing software (TrueGrid, Hypermesh, etc.)
- Programming codes (Fortran, Python, Matlab, C++, etc.)

If this is the perfect job for you please apply online at <http://careers.ara.com> and search by job reference code APPLI02172. All applicants are required to include a cover letter in addition to a resume to be considered.

Job Reference # APPLI02172

