

Mechanical/Aerospace Engineer

Engineering Software Research & Development (www.esrd.com) provides cutting-edge finite element analysis (FEA) technology with a unique implementation that is designed to provide the most reliable solutions for detailed analysis. We seek to meet the analysis needs of the aerospace & defense (A&D) industry through research, consulting, and FEA software development. A strong desire to learn is critical, and you will expand your understanding of the solid mechanics, fracture mechanics, composite analysis, nonlinear analysis, and the finite element method.

You will join a team of highly motivated engineers that seeks to transform the way numerical simulation is performed across the A&D industry. In a small company we each share many responsibilities that can significantly vary from day to day; the typical work to be performed in this position includes the following responsibilities:

- Assist in defining and completing consulting projects involving detailed stress analysis and/or custom solution development for A&D customers.
- Support government research projects aiming to develop new analysis procedures for increasing reliability, affordability, and life of military aircraft.
- Develop custom simulation tools based on FEA.
- Provide feedback and support the development of ESRD's FEA software StressCheck®.
- Interface with customers to help understand and solve their technical problems.
- Serve as a technical support resource for ESRD customers, both for ESRD software and for engineering modeling decisions.
- Provide software training for ESRD customers.
- Represent ESRD at technical workshops and conferences.
- Support the sales and marketing team.
- Occasional travel is required for conferences and on-site customer support.

Requirements

- This position must meet Export Control compliance requirements, therefore "U.S. Person" status is required.
- B.S. or M.S. in Mechanical Engineering or Aerospace Engineering.
- 0-5 years' experience in the commercial or defense aerospace industry, or related field.
- Familiar with structural analysis principles (statics, strength of materials, etc.).
- Interest in software development to help other engineers solve complex problems.
- Self-motivated with strong desire to learn and continually improve.
- Excellent interpersonal skills, both verbal and written.

Preferred Skills

- Programming experience with Matlab, C++, Visual Basic, C#, or similar.
- Experience with FEA software in aerospace applications, or with theoretical background of numerical methods.
- Familiarity with fatigue and fracture analysis.
- Familiarity with metallic or laminated composite aircraft structures.
- Good mathematical background.