



|                   |                            |                      |                               |
|-------------------|----------------------------|----------------------|-------------------------------|
| <b>Job Title:</b> | <i>Mechanical Engineer</i> | <b>Job Category:</b> | <i>Mechanical engineering</i> |
|-------------------|----------------------------|----------------------|-------------------------------|

**Company profile**

**ADACS, Inc.**

ADACS, Inc. stands for **Advanced Durability Assessment and Consulting Services** is a small startup company based in Dearborn Heights, Michigan USA. The company has a local office in Beirut, Lebanon. The company currently focuses on the development of the state-of-the-art fatigue software tools and methodologies for the endurance assessment of engineering components, systems, and structures. An emphasis is placed on research and development in the area of Thermo-Mechanical Fatigue (TMF). In addition, the company provides on-site and off-site consulting and analysis services to design and manufacturing customers. The strategic vision of ADACS is to provide the most advanced and comprehensive TMF solutions and to become the preferred solution provider in this area through alliance partnerships with software vendors, testing labs, and leading research organizations. Current and past customers include: General Motors, Ford, Chrysler, Cummins, Honeywell, John Deere, and others.

Additional information can be found at [www.adacs-eng.com](http://www.adacs-eng.com). Please feel free to contact us at [rhazime@adacs-eng.com](mailto:rhazime@adacs-eng.com) for further inquiries.

**Job Description**

**ROLE AND RESPONSIBILITIES**

- Exploration of applicable crack propagation analysis tools and methods that are applicable for crack growth under cyclic loading and high temperature applications
- Help with development of new features and expanding existing capabilities of our software tools for crack growth, material constitutive modeling, and thermomechanical fatigue damage computations
- Help with the development of User Material Models for commercial FEA codes (Abaqus/Ansys)
- Help with software maintenance and testing including bug fixes and rigorous testing using a well-developed testing plan that includes automation of testing scripts and comparison of results with previous benchmarks
- Help with software support through email and WebEx, as needed, to investigate any issues

**ROLE AND RESPONSIBILITIES**

Masters or PhD Degree in mechanical engineering or a closely related field

**PREFERRED SKILLS**

**Finite Element Analysis, Abaqus, Ansys, Mechanics of Materials, C++, Fortran**

**EMPLOYMENT**

The job offered is a full-time employment with flexible working hours

**LOCATION**

Local office in Sfax, Tunisia