

Composites Engineer

Deadline: Open Until Filled

## **Overview**:

Composites Automation, LLC is a Delaware-based small business founded in 2001, conducting research and development in composite materials and structures and located in close proximity to the University of Delaware. Composites Automation has on-going research programs through SBIR and STTR grants with the Department of Defense, NASA and Department of Energy, related to materials and manufacturing research and product development.

## Key Responsibilities:

- Lead analytical and numerical model development for composite manufacturing processes. Responsible for developing modeling strategies with team members, model implementation strategy and code development.
- Provide technical input to team members on theoretical modeling and analysis of composite processes as well as structures, to include interpretation of FE results and use of established theories in composite mechanics and processing.
- Develop and execute project plans to implement modeling vision into computer code, user-friendly interfaces and GUIs, as well as provide technical support to users.
- Interact and represent Composites Automation on technical matters, with sponsors, subcontractors, and vendors.
- Lead model validation efforts when required to demonstrate specific capabilities ready for commercialization.

## Minimum Qualifications:

- Master's Degree in Mechanical Engineering and 2-3 years (or industry related) experience in composites modeling. Graduating Ph.D with thesis focused on composite modeling are encouraged to apply.
- Experience with CAD/CAE codes such as CATIA, ABAQUS is preferred.
- Demonstrated ability to create custom modeling codes addressing composite processing aspects is preferred.
- Must be able to independently direct the conceptual and modeling strategy development.
- Technical understanding of the benefits and limitations of various composites processing methods (autoclave, out-of-autoclave, liquid molding, thermoforming of primary interest)
- Effective communication (oral and written) of design documentation (presentations, reports, etc.) and engineering presentations.
- Permanent resident or US Citizen preferred.

## Contact Dr. Shridhar Yarlagadda - yarlagadda@compositesautomationllc.com