



MECHANICAL ENGINEER, FULL-TIME

ON-SITE, CINCINNATI, OHIO

JOB RESPONSIBILITIES

1. 3D Printing Operation and Design:

- Create procedures for the safe and optimal operate and maintenance 3D printers
- Troubleshoot issues as they arise and implement solutions to minimize downtime.

2. Prototyping and Design Support:

- Collaborate with engineering teams to translate design concepts into functional prototypes using additive manufacturing techniques.
- Assist in the iteration and refinement of prototype designs based on feedback and testing results.

3. Mechanical Testing:

- Conduct mechanical tests on various materials and components using Instron test frames.
- Prepare test specimens according to established procedures and standards.
- Record and analyze test data, identifying trends and anomalies for further investigation.

4. Documentation and Reporting:

- Maintain detailed records of experimental procedures, observations, and results.
- Generate technical reports summarizing findings and conclusions for review by senior engineers.

5. Safety and Compliance:

- Adhere to all safety protocols and guidelines when operating machinery and handling materials.
- Ensure compliance with quality standards and regulations applicable to additive manufacturing and mechanical testing processes.

QUALIFICATIONS

- Bachelor's or Master's degree in Mechanical Engineering or related field.
- Familiarity with additive manufacturing processes including FDM, SLA, SLS, DMLS, and binder jet.
- Familiarity with CAD software for design and prototyping (e.g., SolidWorks, Autodesk Fusion360).
- Familiarity with basic engineering analysis tools (FEA, CFD, etc.)
- Strong mechanical aptitude and hands-on experience with laboratory equipment.
- Excellent attention to detail and ability to follow established procedures.
- Effective communication skills and ability to work collaboratively in a team environment.

PREFERRED QUALIFICATIONS

- Experience with relevant software like Python, R, and MATLAB, and using frameworks for machine learning, data analysis, and scientific computing.
- Experience designing engineering analysis projects such as FEA and CFD, with strong foundational understanding of the underlying math being used. Experience with using such techniques for optimization is also preferred.
- Experience designing experiments for novel processes/materials.
- Experience designing data collection systems for physical tests.
- Prior experience with vibration analysis, both through computation and physical testing.
- Prior experience with Mechanical Load Test Frames (i.e. Instrons) or mechanical testing methods.

BENEFITS

HIGH GROWTH & DYNAMIC START-UP - STOCK OPTIONS - OPPORTUNITY FOR ADVANCEMENT & LEARNING - HEALTH, DENTAL, AND VISION INSURANCE - PAID TIME OFF