Swift Engineering

Products and Technology Engineering Intern

“Swift Engineering is uniquely positioned in the marketplace to provide both Product Development and Manufacturing products and services, specializing in advanced composites and technologies <www.swiftengineering.com>. The Products and Technology Division ensures that Swift stays an innovative and disruptive company within the markets it serves and in new markets.

Swift Engineering is currently looking for 3 summer interns:

1) Mechanical/Aerostructures intern:
   a. Mechanical/Aero Engineering student studying mechanical and fluids design/analysis with an emphasis on aerostructures. Should be well versed in prototyping using composites and metals, know basic CAD modeling (preferably Solidworks), and be comfortable being part of the flight test crew. Member of the Design, Build, Fly team is a plus. An AMA pilot who has built and flies their own aircraft also a plus.

2) Mechanical Intern:
   a. Mechanical/Aero Engineering student studying mechanical and thermal design/analysis with an emphasis on CAD modeling. Should be well versed in prototyping using composites and metals, understand basic mechanical analysis, and be proficient in Solidworks. Member of the SAE Formula Triton Racing team is a plus.

3) Electrical/Mechatronics Intern:
   a. Electrical/Mechatronics Engineering intern studying software and hardware design, interested in communication protocols. Should be well versed in standard prototyping and formal microcontroller platforms and integration and sensor integration. Member of a formal university sponsored team is a plus.

Description: Engineering Intern is an entry level position, working under close supervision, to provide support to project engineers who are responsible for all tasks pertaining to realization of parts / products, in coordination with all other departments within the company.

FLSA Status: Non – Exempt (Hourly)

Reports to: Chief Scientist

Supervises: NA
Budgets: NA

Purpose:
Swift Engineering is uniquely positioned in the marketplace to provide both Product Development and Manufacturing products and services, specializing in advanced composites and technologies. Product and Technology Division ensures that Swift stays an innovative and disruptive company within the markets it serves and in new markets.

Engineering Intern ensures that a part / product are effectively and successfully realized and design / development projects are effectively and successfully executed.

Duties and Responsibilities:

- Product / Part Design
- Tool / Jig Design
- Engineering calculations / analysis
- Create Engineering reports / presentations
- Create internal specifications and procedures
- Establishing product structures (Item, BOM, Routing, Customer spec summary, Manufacturing aide, etc.) in the company's ERP/MRP system per operating procedures
- Communicate changes and deviations to Manufacturing by releasing revisions, red-lines and Engineering Orders through Senior Engineers
- Developing ply patterns and creating cut files
- Physical manufacturing of parts and assemblies
- Create / support product and project estimation
- Customer spec review
- Project management for build-to-print tasks as required, which could include;
  - Establish master schedule
  - Coordinate, monitor and adjust schedule in coordination with other departments
  - Coordination with shipping / receiving to assure that materials arrive with all required documentations
  - Coordinate with Quality Assurance with first article inspections
  - Interface with customers

Qualifications:

- BS degree in-progress in Engineering

Skills Required:

- Fundamental mathematics
- Fundamental physics
- Excel, Word, Outlook, MS Project

Working Conditions:
Primarily in an office environment, and shop environment.

This job description in no way states or implies that these are the only duties to be performed by the employee(s) incumbent in this position. Employee(s) will be required to follow any other job-related instructions and to perform any other job-related duties requested by any person authorized to give instructions or assignments.

A review of this position has excluded the marginal functions of the position that are incidental to the performance of fundamental job duties. All duties and responsibilities are essential job functions and requirements and are subject to possible modification to reasonably accommodate individuals with disabilities. To perform this job successfully, the incumbent(s) will possess the skills, aptitudes, and abilities to perform each duty proficiently. Some requirements may exclude individuals who pose a direct threat or significant risk to the health or safety of themselves or others. The requirements listed in this document are the minimum levels of knowledge, skills, or abilities.

Swift Engineering is an EOE.

All employees must be “US Person” per ITAR Requirements

This document does not create an employment contract, implied or otherwise, other than an "at will" relationship.

_____________________________  __________________
Employee Signature               Date

_____________________________  __________________
Director Signature               Date