Internship Position/Title: Engineering Intern

Company Name: Hayward Tyler, Inc.

Location of internship: Colchester, VT

Company Overview: Hayward Tyler, Inc. is a manufacturer of high pressure, high temperature pumps and specialty electric motors for service in hard-to-handle fluids. HT services the conventional Power, Chemical and civil Nuclear markets.

Hayward Tyler, Inc. understands the demands placed on generating stations to keep the grid active, and supports our customers in every way we can. Our equipment is critical to maintaining plant operations, and in the Nuclear sector, critical to the safe operation of the plant. Most of our product offering is large industrial equipment. Electric motors are routinely over 1000 HP, and pumps can be pumping upwards of 125,000 Gallons/Minute. The company is celebrating its 200 year anniversary this year (1815-2015). Hayward Tyler has a legacy of solving difficult industrial problems that bridges the first and second Industrial Revolutions. Our Engineering Team is dedicated to advancing this legacy of Engineering Excellence for the next 200 years.

Job/Project Description:

Students will be involved in diverse projects and contract-related work as follows (but not limited to):

1. Bill of Material Generation
2. Material Selection
3. Mechanical Design
4. Consolidation of Components
5. Redesign of Components
6. SolidWorks Model and Drawing Creation
7. Pressure Vessel Calculations
8. Specification Review

In order to perform the assigned duties it is necessary to have well developed analytical skills as it applies to rotating mechanical equipment design and analysis and a fundamental understanding of mechanical engineering principles.

Preparation of assigned work may require development of sketches, CAD drawings, calculations, models, bills of materials and technical reports. Validation of these processes will require the performance and check of most types of calculations, design and analysis, and test validation using both computer aided and manual techniques. Many of these
activities will require close collaboration with design engineers, contract management, quality assurance, and manufacturing personnel.

Students will be a part of the design engineering team, and be expected to conduct themselves in a professional manner. Students will be assigned a mentor to help guide them through the various requirements, and expectations, and also provide assistance on challenging technical work.

**Required Skills & Qualifications:**

- BS ME student that has completed at least their Sophomore year
- Proficient in Microsoft Office Suite expected
- Proficient in Solid Modeling
- Strong interpersonal and problem-solving skills
- Detail oriented, organized and highly motivated.

**Additional Preferred Skills & Qualifications:**

- Interest in rotating equipment & induction motors preferred
- Exposure to MathCAD preferred
- Experience in SolidWorks preferred

**Start & End Dates:** Negotiable. Preferred: May 11th – August 21st

**Hours/week:** 40 hour work week. Hayward Tyler, Inc works 8.5 hr days Monday-Thursday, and a 6 hour Friday

**Salary/Compensation:** $12/hr

**Company Supervisor Name:** Benjamin Hardy, Director of Engineering

**Opportunity for students to continue working part-time during the school year?**

☒ Yes  ☐ No

**Additional Comments:**