Position Profile

Job Title: Intern, Engineer  Date: 02/06/19

Reporting To: Engineering Manager  Revision Date:

Division: Wellsite Technology

JOB SUMMARY
Will be part of a small team designing and implementing the next generation of drilling rigs control and instrumentation systems. Our group is responsible for the strategy, planning, design and delivery of drilling rig automation, analytics and drilling performance systems. In this role, you will have the opportunity to use your research skills, your design capabilities and your engineering knowledge to help Ensign design the next generation of automated drilling rigs. You will have the opportunity to learn about the drilling process, from well plan to cased hole. You will learn about the equipment and control systems required to successfully drill a well. You will have the opportunity to work with data analytics using rig data, offline data and third party data sources and will be exposed to our AI/ML activities.

INTERNAL RELATIONSHIPS
Would work with the EDGE team on rig controls, analytics and automation projects. Would work with the Operations team. Would work with the Engineering team.

Position Responsibilities:
* Analyze user requirements and the design of process and/or mechanical equipment in order to optimize system development
* Analyze user requirements, procedures, and problems to identify the system components and processes needed to deliver a world class rig automation package
* Work with engineers and data scientists on big data projects, AI and ML
* Responsible for the technical aspects of project engineering as it relates to tasks (i.e. reporting)
* Take part in the design and test of control systems

EXTERNAL RELATIONSHIPS
Would interface with controls and automation vendors as needed, possibly with customers as needed

SPECIFIC RESPONSIBILITIES AND ACCOUNTABILITIES
Exposed to test, troubleshoot, install, upgrade and maintain 3rd party software, hardware and instrumentation. Work with engineers on rig optimization and performance projects. Work with rig data sets on analytics projects

OTHER DUTIES
* Business Ethics – Fully understands Ensign’s ethics policy and its application in all business dealings including contractual agreements and contract negotiations.
* Occupational Health and Safety – Fully understands the Ensign Health and Safety policy and self-responsibility for his/her own health and safety at work. Responsible to avoid adversely affecting the health and safety of others through any act or omission.
  o Responsible for the correct use of protective clothing as provided by Ensign when visiting or working in a shop, yard, or other field location.
  o Responsible for the correct use of equipment and for guarding against misuse or damage to such equipment.
  o Responsible for reporting any hazardous situations arising in the workplace that cannot be self-corrected or injury incurred during the course of work, no matter how minor.
  o Responsible for avoiding injury resulting from manual handling tasks associated with his/her employment, by use of risk assessment, correct mechanical handling equipment and correct manual handling techniques.
TECHNICAL COMPETENCIES
Enrolled in a program leading to an accredited engineering degree or equivalent experience.
*Experience or coursework equivalent
  - with instrumentation and measurement equipment and systems, calibration and maintenance
  - Excellent verbal and written communications skills.
  - Excellent computer skills, database experience a plus, working with large datasets a plus

BEHAVIORAL COMPETENCIES
Perform research and analysis to keep drilling rig technologies state of the art.
* Identify, select and manage software used in evaluation
* Communicate effectively with Operations, Engineering, Sales and Marketing.
* Work with a variety of internal and external customers.

MINIMUM EDUCATION AND EXPERIENCE
Recently degreed engineer or currently enrolled in a degree program

QUALIFICATIONS
Standard coursework in physics, mathematics, statistics
Coursework in petroleum engineering or related a plus

ADDITIONAL INFORMATION
This position will be based in Denver, Colorado. The successful candidate may be asked to travel to Ensign's field offices, rig construction facilities or drilling rigs working in the field.

Ensign United States Drilling Inc. is an Equal Employment Opportunity and Affirmative Action employer.