



Zoomlion Heavy Industry NA, Inc.

Engineering Intern, Control Systems

Position Objectives

The Control Systems Engineering Intern reports to the Engineering Manager – Control Systems, the control systems product development leader for Zoomlion North America. The intern will participate in research, designs, tests, and validation of heavy machines for the North American market. The intern will work closely with engineers of all levels and other disciplines as part of the engineering team.

Essential Duties and Responsibilities

Under the supervision of the engineering manager:

- Assist in the development and testing of electric and hydraulic control systems for off-road heavy machines. This includes developing concepts, designs, and validation of those designs.
- Supervised creation of control software or correction of software issues.
- Write software scripts for testing on the bench or hardware in the loop (HIL).
- Analysis of communications messaging after tests to determine proper functioning.
- Assists with the designs, details, and coordination of the fabrication and assembly of the tooling and fixturing required to support tests of our designs.
- Safety compliance around heavy machinery, hydraulic systems, and electrical systems.
- Communicates with others on the control, structure, and power engineering teams regularly to achieve results.

Education and Experience

- Presently pursuing or recently graduated from a bachelor's or master's program in electrical or computer engineering.
- Completed basic engineering classes and demonstrated the ability to work as a team member on class projects.
- Demonstrated work experience is a plus.
- Specific training, classwork, and working experience with the following are ideal:
 - Exposure to programming languages such as C, C++, Python, MatLab, or other languages.
 - Hands-on work with electrical design projects, ideally embedded.
 - Able to document projects, tests, and create reports.

Job Knowledge, Skills, and Abilities

- Possesses good communication skills – oral, written, and listening.
- Detail-oriented and organized.
- Understands general safety precautions in an engineering environment dealing with large heavy machinery.
- Demonstrated computer skills and experience with Microsoft Office applications.
- Able to interpret drawings and schematics.
- Basic knowledge of CAN and protocols such as J1939 would be impressive.
- MatLab/Simulink exposure and experience is a plus.
- Able to organize work tasks and time to complete tasks within critical assigned deadlines.
- Must maintain the highest level of confidentiality.
- Works well independently with minimal supervision and as part of a team demonstrating and great attitude.

Physical Demands:

- Required to sit for periods using a computer.
- May need to work on a machine and be able to climb up to levels of up to 10 feet, using hand tools and DMMs.

Work Environment:

- Typical office and lab working conditions in environmentally controlled conditions.
- Shop and outside test in environmentally uncontrolled conditions.

Will be required to perform other duties as requested, directed, or assigned to assist with achieving stated project goals.

Interested candidates for a Summer Internship opportunity contact Zoomlion Human Resources at 262.835.1828, ext. 107, or send your resume to hr@zoomlion-na.com.

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