
Company Overview:

Weichai Power is a multi-field and multi-industry international group which owns multiple business segments of powertrain, commercial vehicles, agricultural equipment, intelligent logistics, construction machinery, marine transportation equipment, and other business segments. Headquartered in Weifang, China, Weichai Power has set up three innovation centers in US, Germany, and Japan, respectively. We are actively looking for specialists and engineers for research and development in hydraulics area.

Sr. Research Engineer/Specialist in Hydraulic Systems

Responsible for:

- Hydraulic system innovation, simulation, and control
 - Proposing innovative hydraulic system design based on machine performance requirements
 - Designing and analyzing new hydraulic system concepts (mainly for crawler hydraulic excavators)
 - Providing, calculating, and selecting the specific performance requirements for the related hydraulic components
 - Controls design for hydraulic systems
 - Modeling and simulation of hydraulic systems and the related construction machines
 - Diagnostics and prognostics for hydraulic systems and components
 - Documenting research reports
- Commercialization of research results
 - Feasibility analysis
 - Market and cost analysis
- Organizing technical meetings and reporting technical results

Skill requirements:

- Hydraulic engineering, mechanical engineering, Electro-mechanical engineering
- Master or Ph.D. Degree (preferred)
- Must have a solid background of hydraulic engineering and controls theory
- Must understand basics of computer control software and hardware
- Familiar with principles of hydraulic systems and control methods
- Familiar with the working principles of pumps, valves, motors, and cylinders of hydraulic system
- Familiar with hydraulic system simulation software (e.g. Matlab / Simulink, AMESim)
- Strong in communication skills
- A team player
- More than 5 years of related experience

Preferred but not necessary

- Hydraulic system design experience and hydraulic control design capability
- Hydraulic components integrated ability
- Pioneering thinking and innovative mindset

Sr. Research Engineer /Specialist in Hydraulic components

Responsible for:

- Innovations in hydraulic components
 - Tracking the most advanced engineering technologies in hydraulic components
 - Tracking the most advanced manufacturing technologies in hydraulic components
 - Proposing innovative new concepts hydraulic pumps and hydraulic motors
 - Modeling and simulation for hydraulic components
 - Design and analysis of hydraulic components
 - Writing technical reports
- Commercialization of research results
 - Feasibility analysis
 - Market and cost analysis
- Organizing technical meetings and reporting technical results

Skill requirements:

- Mechanical/Hydraulic engineering
- Master or Ph.D. Degree (preferred)
- Must have a solid machine design and hydraulics/hydraulic systems knowledge
- Must have a solid mechanics background, especially fluid mechanics
- Have mechanical component analysis and design capability
- Ability to do various calculation based on the requirements
- Skillful in using related software, such as AMESim
- Familiar with analysis of dynamics, vibrations, and noise for hydraulic components
- Familiar with hydraulics of construction machinery
- Strong in communication skills
- Pioneering thinking and innovational mindset
- A team player
- More than 5 years of related experience

Sr. Research Engineer /Specialist in Electric Drive Systems

Responsible for:

- Electric drive systems innovation, simulation, and control
 - Proposing general layout and design parameters for electric drive system according to the machine performance requirements
 - Designing and analyzing electric drive system
 - Providing, calculating, and selecting the specific performance requirements for the related electric components
 - Designing controls for electric drive systems
 - Electric drive system simulations
 - Designing and implementing various tests
 - Documenting research reports
- Commercialize research results
 - Feasibility analysis
 - Market and cost analysis
- Organizing technical meetings and reporting technical results

Skill requirements:

- Electric engineering, Mechanical engineering, Electro-mechanical engineering
- Master or Ph.D. Degree (preferred)
- Must have a solid knowledge of drive line and controls theory
- Must understand basics of computer control software and hardware
- Familiar with electric drive system working principle and control methods
- Familiar with the working principles of electric generator/motor and power electronics
- Familiar with related system simulation software (e.g. Matlab / Simulink, AMESim)
- Strong communication skills
- A team player
- More than 5 years of related experience

Preferred but not necessary

- Electric components integration ability
- Hydraulic drive systems (Hystat, CVT, etc) and hydraulic control design experiences
- Pioneering thinking and innovative mindset

ALL ABOVE JOB LOCATION: CHICAGO, USA

How to Apply:

- Email a cover letter and resume to HR@weichaiamerica.com.
- You may choose to learn more about our company at www.weichaiamerica.com and/or www.weichai.com

Compensation & Benefits:

- Compensation is competitive and commensurate with experience
- Paid vacation, healthcare benefits, dental and vision insurance, 401k

WEICHAI IS PROUD TO BE AN EQUAL OPPORTUNITY EMPLOYER. WE EVALUATE QUALIFIED APPLICANTS AND DO NOT DISCRIMINATE AGAINST PERSONS ON THE BASIS OF RACE, COLOR, AGE, RELIGION, SEX, NATIONAL ORIGIN, DISABILITY, VETERAN STATUS AND OTHER PROTECTED CHARACTERISTICS.