



Software Engineer - Linux

Department:	<i>Engineering</i>
Reports To:	<i>Lead Software Engineering</i>
Supervises:	<i>N/A</i>
FLSA Classification:	<i>Exempt</i>
Approved By:	<i>Thomas Christiansen</i>
Revision Date:	

JOB DESCRIPTION:

HED is offering an exciting opportunity to join a growth-oriented small business with a growing product offering in the on-vehicle market. We work with leading OEMs to help design their vehicle systems using CAN controller networks primarily and in recent years expanded our portfolio to include Telematics modules and services. This is a fast paced market and we are a leading provider who making this exciting technology available to small to midsize OEMs in our segment who are eager to benefit from the capability. Linux has become a larger part of our platform so we are looking to again expand our team to keep up with the growth.

JOB PURPOSE:

Design, develop, and test firmware and applications on HED® hardware running Linux operating system.

Support HED customers with development using the HED supplied board support package (BSP)

ESSENTIAL DUTIES and RESPONSIBILITIES:

	<i>% of Total Time</i>
• Designing and Developing Linux BSP	50
• Designing and Developing Linux Application	15
• Customer technical support	15
• Product support (production, resolving bugs, etc.)	10
• Misc.	10

An individual in this position must be able to successfully perform the essential duties and responsibilities listed above. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of this position.

The above list reflects the general details necessary to describe the principle and essential functions of the position and shall not be construed as the only duties that may be assigned for the position.

MINIMUM QUALIFICATIONS:

Education

- BS in Electrical Engineer, Computer Science, or similar

Experience and/or Training

- 0-5 years of software development
- Proficient in:
 - C or C++
 - Scripting (BASH, Python, etc.)
 - Linux kernel and microprocessor peripheral driver development
- Knowledge of:
 - Working with hardware, schematics, and component data sheets
 - Utilizing\contributing\modifying open source software
 - Standard programming concepts, practices, and procedures
 - Software version control best practices
 - Hardware board bring up
- Abilities:
 - Participate in cross functional teams (matrix environment)
 - Good verbal and communication skills
 - Create product documentation such as user guides
 - Technical verbal and written communication skills
 - Travel up to 10%, typically under 5%

PREFERRED QUALIFICATIONS:

Experience and/or Training

- Proficient in:
 - U-Boot or other standard boot loaders
 - Using GIT for software version control
 - Automated builds
 - Agile development practices
 - Code review best practices
- Knowledge of:
 - Requirement development\management
 - Controller Area Network – CAN
 - Network Management (Ethernet, Cellular, Wi-Fi)
 - Raspberry Pi or similar embedded board development
 - GNU make files
- Abilities
 - Root cause analysis
 - Using scopes, digital multi-meter, and other similar equipment
 - Managing multiple project\tasks



PHYSICAL AND MENTAL DEMANDS:

While performing the duties of this job, the employee is frequently required to sit, talk and/or hear, and/or use hands to finger, handle, or touch objects, tools, or controls. The employee is occasionally required to stand, and/or walk. The employee must occasionally lift and/or move up to 10 pounds while moving files or small packages. Specific vision abilities required by this job include close vision and the ability to focus.

The mental and physical requirements described here are representative of those that must be met by an individual to successfully perform the essential functions of this position.

WORKING ENVIRONMENT:

Work is typically performed in an office environment. The noise level in the work environment is usually moderate. Infrequent travel to a customer's location may be required and may include factory or test environments.

The work environment characteristics described here are representative of those an individual encounters while performing the essential functions of this position.

I have read and understand the duties, responsibilities and requirements for this position.*

Employee Acknowledgement

Date

*This document does not create an employment contract, implied or otherwise, other than an "at-will" employment relationship. HED, Inc. retains the discretion to add duties or change the duties of this position at any time.