LIEBHERR

Automotive
ADS/Software/Advanced Sensors

ALTEN ADDED VALUE
Provided suggestions for better programming

Provided product structure expertise

Led and organized software development

Refactored software development and improved distribution

KEY TOOLS & TECHNOLOGIES
C++, Unix/Linux, XML, Python, Jenkins, Jira, KVASER CAN, SQL, .NET, Visual Studio

KEY DATA
Team Size: 5 Engineers
Time: Since 2021
Location: Newport News, VA
Work Package

ALTEN TECHNOLOGY

EMBEDDED SOFTWARE FOR AUTONOMOUS MINING

OVERVIEW

At MINExpo 2021, Liebherr demonstrated the development of autonomous solutions based on an open, interoperable mine autonomy platform. To enable next-generation autonomous haulage solutions, Liebherr has created an industry-first open protocol.

With less reliance on on-site infrastructure and centralized supervisory systems, Liebherr's autonomous haulage solution provides the next generation of onboard intelligence.

PROJECT DETAILS

- Modified power train installation components
- Debugged and investigated embedded system-related issues in Visual Studio
- Ensured program development compatibility and portability between multiple programs
- Developed new modules for UNIX C++ applications
- Developed scripting languages, tools, and methods to optimize software development and testing activities
- Performed code reviews in C++, Python, and shell scripting languages for moving into development on various operating systems
- Corrected a variety of client-reported defects and applied patches to the existing code base
- Developed the following automotive modules: telematics, autonomous truck research, autonomous haulage, mine site servers, traffic management system
- HIL and testing automation