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## Ad for Junior Software Engineer

4<sup>th</sup> December 2019

### 1. Introduction

Sedna is an industrial technology company focused in the global mining sector. We currently have operations in South African and the United States of American. We have delivered projects in various conditions and across the globe.

This role is for our expanding young dynamic RnD team. Although this position is for a specific solution, the RnD team is a cross discipline engineer team covering:

- Electrical
- Electronic
- Mechanical
- Systems
- Functional Safety and Standards
- Software

### 2. Specific Role

The role is for development of our V2x solution for use in manned interactions with automated mobile equipment in the mining industry. The solution is an inhouse built platform with various partners providing pieces to the final system. The role will cover the following key responsibilities:

1. Assistance in development of scopes of work
2. Assistance in risk assessment on functional software logic
3. Development in line with safety standards (IEC 61508, ISO26262, ISO13849)
4. Code review of peer's development
5. Experience in version control software such as bitbucket
6. Development of software
7. Software optimization
8. Algorithm optimization and development
9. Server architectures
10. Communications architectures
11. Bootstrap development and remote upgrading
12. System integration (hardware / firmware / software / report)
13. Designing of unit tests and performing unit testing on software

14. Complete system testing
15. Development of documentation for software systems
16. Bug fixing and management

### 3. Role requirements

1. Mechatronics degree from a recognized institution
2. C, C++
3. Matlab
4. Embedded processors
5. Computer Literacy – Advanced Level; Competency in Microsoft applications including Word, Excel and Outlook.
6. Valid driver's license

Please forward applications to [mreitsma@sedna.net](mailto:mreitsma@sedna.net)