

MASTER OF SCIENCE IN SOFTWARE ENGINEERING

MIDS UNIVERSAL INTERFACE FOR THE SELECTION OF LINK 16 MESSAGES

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Department of Defense is required to provide MIDS terminals for subsurface, surface and airborne weapon systems. The MIDS terminals use legacy software that does not have the flexibility to support multiple platform interfaces. With evolving interface requirements, there is a need to accommodate more platforms that require a new interface design software approach.

This thesis proposes a new software interface design approach to effectively support the emergent need of various platforms to integrate with the MIDS terminal. The current designs of the MIDS interfaces are not flexible and are very costly to support new emergent requirements. This thesis provides a framework, which consist of a Graphical User Interface (GUI) that allows the developer to create new platform interface specification. Once the interface has been created, the automation of code generation can be achieved.

KEYWORDS: Control Panel, Embedded Systems, Framework, Source Code, Interface, Universal, Interoperability, Software, Graphical User Interface

