

**Master 2018**

**Ms. Meenal Prabhakar**

**Development of an Embedded Prototyping Platform with Model Based SW Support.**

***ABSTRACT - Masterthesis***

Many automotive companies use MathWorks products throughout the embedded system development-from system design to implementation to test and verification. Utilizing model-based with MATLAB and Simulink enables engineers to simulate and generate code for production embedded systems, prototyping systems, and test systems. Simulink also serves as a virtual testbed to verify hardware and software implementations through simulation of plant or environment models. Matlab enables embedded system analysis and optimization by providing close integration with development tools and calibration systems.

Using Matlab/Simulink, an embedded test system for verification and test in automotive environment is developed and its function experimentally verified.