**Fire Fighter Robot**

Functional Specifications

ENEL 387 Design Project

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The Functional Specifcation will be a multi-page document, writen in the form of a simple user manual for the robot being developed. The most important part of the Functional Specifcation is that it describes, in detail, the various functions and tasks that the project will perform. It will include a block diagram, a sketch of the physical system, a list of all user controls and indicators, a list of all other inputs and outputs as well as a short description of the overall operation of the device.

The Functional Specifcation is your road map for the project. The fnal project will be partially evaluated against the list of tasks and functions that you lay out in this document.

We are going to tackle below:

* must accept dynamic inputs from the outside world
* must provide controlled outputs to the outside world
* must incorporate at least two sensors in additon to those provided on the ENEL 384 board.
* must include both digital and analog sensors
* must incorporate at least two output devices in additon to those provided on the ENEL 384 board.
* must have at least two diferent output interface systems (PWM, SPI, UART, GPIOá to external drivers)
* must have at least one output device with a current requirement greater than the STM32F100 rated output current