Different Implementations of Unmanned Ground Vehicle: A Survey

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Abstract--- Unmanned ground vehicle is smart autonomous vehicles that can mainly capable to do tasks even without the need of a human operator. The automated vehicle is used for the off road navigation and mainly used for military operation, which includes detecting bombs, border patrol etc. UGVs mainly use sensors to observe the environment and it automatically take decisions about its behavior and pass this information to human operator who control the vehicle through teleportation. In this paper we analyze and contrast the technical challenges, methods, and the performance of an Unmanned Ground Vehicle (UGV) which uses different types of methods for controlling. This paper summarizes the fundamental problems and enumerates factors that should be considered when addressing these problems. Existing techniques are categorized in such a way that they impose the functionality among the systems which are available. This paper also describe about the different methodologies used for implementing a UGV. The benefits of using UGV for defense purposes are also described in this paper. Special issues associated with the controlling of UGV are also addressed. This review provides a fundamental analysis of the remaining problems in this field.