# Abstract

The radio communication cannot have a closed form solution since it belong to a chaotic dimension. But we can model its behavior up to a certain extent that is very helpful to be employed for mathematical calculations. For wireless communication, it is very important to provide mathematical characterization of indoor propagation. So far existing models can be classified in two categories: site specific and statistical models. Since site specific wave propagation is very expensive and require high computational effort, statistical model explaining the environment and its reflections in the system is computed. This thesis provides a semi-deterministic pathloss and shadowing effect model for indoor environment along with the probability of bit error that occurs due to shadowing effect.