

# 802.11 Jamming *A*ttack and Mitigation

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## **Abstract**

802.11 wireless network has become prevalent by providing local area network with mobility, convenience and low cost. At the same time, it suffers several typical problems, such as being unsafe and more vulnerable than traditional Ethernet due to the shared nature of wireless medium which makes wireless network attacks easy to be launched by adversaries. At first, this talk presents a few kinds of vulnerability in 802.11 network, including collision avoidance mechanism, packets collision and security weakness. Then jamming attack techniques will be specified together with their behaviors. Also I will discuss the attack theory and different types of jamming attack models. After that, I will review the feasibility of defeating attackers and some strategies for wireless jamming attack detection and mitigation. Among those, both the basic and advanced skills will be introduced. Finally, I will talk about my future research plan in the field of wireless attack and mitigation.