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The push for improved driving experience, including the ultimate goal of driver-less vehicles, has fueled the development of Connected and Autonomous Vehicles (CAVs). Connectivity is an important enabler for CAVs, as it allows for autonomous vehicles to directly participate in the Intelligent Transportation System (ITS) and make collective intelligent decisions. 5G mobile networks play an important role in providing vehicular connectivity as mobile networks support mobility by default. However, the density of vehicles is high in urban areas that poses challenges for the support from mobile networks. The talk will first discuss the four main types of connectivity scenarios that can be supported in Vehicle-to-Everything (V2X) applications and the various Levels of Automation (LoA) for autonomous driving. It will then provide a detailed overview of the technologies that can support V2X communications. The last part of the talk will introduce the SwiftV2X research project that proposes and studies Smart mmWave and MultiRATs for Multihop V2X communications as well as other research projects about autonomous driving