

In this talk, I will describe and demonstrate the operation of Time Domain's UltraWideband (UWB) RF platform. The discussion includes: principles of operation, characteristic advantages, two-way time-of-flight range measurement, example commercial applications, current academic research areas, and use in undergraduate education. The discussion also includes two short videos. The first shows the operation of a multi-static radar used as a virtual fence to detect, localize, track and characterize targets. The second shows the ranging capability used in a number of robotic applications. The presentation will conclude with a demonstration of UWB platforms in operation as a radar, ranging platform and network.