

**IEEE Portugal APS/EDS/MTTS Joint Chapter
Instituto de Telecomunicações, Instituto Superior Técnico**

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UWB Antenna Applications

Nuno Pires

Instituto Superior Técnico
Instituto de Telecomunicações

Email: nuno.pires@ist.utl.pt

A brief review of Ultrawide Band (UWB) technology will be presented. A more in depth talk about UWB antennas for two particular applications will follow: an external Wireless Universal Serial Bus device and an autonomous robot localization system. A simple UWB antenna efficiency measurement technique being developed with the University of Liverpool will also be presented. This overview reflects some of the current antenna research on the subject at Instituto de Telecomunicações (IT)/Instituto Superior Técnico (IST) and Laboratoire d'Électromagnétisme et Acoustique (LEMA)/École Polytechnique Fédérale de Lausanne (EPFL).



Nuno Pires received his MSc in Electrical and Computer Engineering from Instituto Superior Técnico (IST), Technical University of Lisbon in 2009. His Master thesis, supervised by Prof. António Moreira at Instituto de Telecomunicações (IT) presented a dielectric loading technique for miniature Ultrawide Band (UWB) antennas. He was a PhD Grantee of IT in 2009-2010. In 2010 he enrolled the IST-École Polytechnique Fédérale de Lausanne (EPFL) joint doctoral agreement under the supervision of Prof. António Moreira at IT/IST and Prof. Anja Skrivervick at Laboratoire d'Électromagnétisme et Acoustique (LEMA)/EPFL. He is currently a Doctoral Assistant at LEMA/EPFL where he works on UWB and Body Area Network antennas and applications.