ROBERT THORPE MENG

Born 22/9/1978 Single

Employment

March 2006 – March 2010
Dell Inc.
Antenna Engineer
Responsibilities:-

- Specification of antennas for notebook and desktop PCs.
    - Specification of electrical performance parameters for Bluetooth, Wireless LAN, Mobile Broadband and UWB antennas.
- Testing of Wireless LAN, Mobile broadband, Bluetooth and UWB performance. Using active and passive test. Auditing of results from ODMs supplying Dell.
- Integration of Bluetooth modules. Auditing of integration done by ODMs supplying Dell.
- Investigation and mitigation of interference issues on desktop and notebook PCs.
- Interface with wireless module vendors for antenna issues.
    - Specification of performance parameters and coexistence systems.
    - Form- factor and placement of modules.
    - Assistance with PCB layout issues and shielding issues.
- Documentation of best practices for ODMs. Documentation of active testing, Bluetooth integration, interference reduction and chamber setup.
- Interface with regulatory group for issues related to the above.
- Specification, purchase, setup and maintainance of Dell's antenna lab and Anechoic Chamber in Ireland.
- Training of antenna lab technician.

August 2001 – February 2006
Antenova Ltd.
Antenna Design Engineer/Software Engineer
Responsibilities:-

- Design of antennas using prototyping and simulation
    - Majority of those antennas were for portable handsets.
    - Some for basestations and access points.
    - Worked for customers in Taiwan, South Korea, Europe and the US.
- Spent 3 months of 2004 in South Korea working with customers and partners on portable handset antennas. This work helped lead to a licensing deal.
- One of three people responsible for measurement equipment.
    - Together responsible for design, maintenance and calibration of Anechoic chambers. Also for purchase and setup of other measurement equipment.
- Research work
    - High- impedance surfaces.
    - Propagation modelling.
- Software coding and design
    - Radio- wave propagation modelling software
    - Anechoic Chamber control software
    - Phased array design software

    - Also documentation and training on the use of some of this software
- Simulation software
    - Selection of simulation software
    - Administration of simulation software

Profile

- Antenna engineer.
- Experience of designing many types of small antenna for many applications.
    - PIFAs, Patchs, monopoles, dipoles and many types of dielectic antenna.
    - All stages of design: simulation, prototyping and manufacturing test runs.
- Experience of debugging antenna related problems and interference problems on handsets and notebook computers.
- Experience of technical procurement of antennas for notebook computers.
- Experience of the specification, purchase, design, maintenance, calibration and verification of Anechoic Chambers.
- Working knowledge of mobile communications network protocols and radio- wave propagation. Experience of applying this to drive Radio card/module specifications.
- Experience of debugging RF PCB layout issues.
- Experience of creating specifications and working with third- parties on meeting them.
- Experience of writing and maintaining moderately complex software.
- Experience of working to tight deadlines.
- Experience of working in abroad.
- Member of the IEE.
- Current clean driving license.

Software Skills

- Ansoft HFSS (the high- frequency structure simulator)
- Solidworks
- Microsoft Windows, Linux, Solaris and HPUX.
- Microsoft Office and PowerPoint.
- Through knowledge of C.
- Some experience with Perl, C++, VHDL, Pascal, lisp and x86 assembly language.
- Windows API programming, Microsoft foundation classes, Gtk+ and Tk.

Publications

- "Characterising the Quiet Zone of an Anechoic Chamber" J.R.Thorpe and J.C.Bennett. IEE conference on Antenna Measurements and SAR, 2004
- "The challenges associated with antenna integration" J. R. Thorpe. Magazine article for Portable Design magazine 2005.
- "An Analysis of The Accuracy of Efficiency Measurements of Handset Antennas Using Far- field Radiation Patterns", Irfan Kadri, Tim Palmer, and Robert Thorpe, AMTA 2005 Newport
- "Experimental Characterization of Coaxial Sleeve Baluns for Handset Measurements", S A Saario, J R Thorpe and Devis Iellici, BEMC 2005
- "Study and Optimisation of A Broadband Dielectric Antenna" Z. Wang, C. C. Chiau, X. Chen, B. Collins, S.P. Kingsley, S. Puckey and J.R. Thorpe. IEEE International Workshop on Antenna Technology, 2005.

These papers are available on request

Education

Sheffield University
Masters in Electronic Engineering (with Computing) (MEng) Grade 2:1 1997 - 2001

Studied a wide range of topics, covering computing, VLSI design, IC fabrication, management and communications as well as general electronics.

Final year project was to implement an open - source microprocessor written in VHDL on an FPGA. This involved learning Synopsys, Modelsim, Xilinx Foundation and Sun Solaris.

Group project (3rd year) involved the designing and constructing dielectric resonator antennas (DRA's). This required the study of electromagnetics and methods for measuring antenna characteristics.

At the time of my degree Sheffield university was rated 5*A for research and 24/24 for teaching, the highest possible marks.

Training

- Mobile Cellular Evolution Wray Castle course
- Several conferences and seminars
- Ansoft HFSS training
- Solidworks 3D training
- Various courses on Presentation skills and Influencing

Hobbies and Interests

- Home brewing
- Reading & listening to music

Referees are available.