Xia Lixun（夏立勋)

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LinkedIn

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Work Experience

2014.6 - 2015.4 Sr. DSP engineer of Harman Suzhou, China P.R.

Responsible for development of vehicle audio amplifiers for varies signal processing applications including digital audio effects, active noise cancellation, sound synthesis etc.

2010.10 - 2014.3 Research and development engineer of Acosense AB, Sweden.

Responsible for development of active acoustic spectroscopic sensors for fluid measurement. It involves hardware design for sensory signal conditioning and acquisition; software design for signal processing and machine learning.

Education

2008.9 - 2010.9 M.Sc. Integrated Electronic System Design, Chalmers University, Sweden.

2005.9 - 2008.6 M.Sc. Control Science and Engineering, Central South University, China.

2001.9 - 2005.6 B.Sc. Automatic Control, Central South University, China.

Project Experience

2014 - 2015 Software development engineer of varies features for automobile audio amplifiers: active noise cancellation, engine sound synthesis, tracking power supply, and digital audio effects on ADI fixed point and floating point processors.

2010 - 2014 Software development engineer of $ACOspector^{TM}$, an industrial fluid property measurement sensor (accelerometer) based on active acoustic spectroscopy measurement. Products have been deployed among pulp and paper, chemical factories in Sweden. For more information please visit www.acosense.com.

Technical Skills

Modelling and simulation using Matlab/Simulink.

Digital/statistical signal processing.

Proficient in C/C++.

Applied knowledge in machine learning (Regression analysis).

Hardware description (VHDL) and verification (Testbench based).

Applied knowledge in Linux application development.

Embedded system design and development based upon FPGA/DSP.

Circuit simulation and analysis with SPICE tools.

Schematic capture, simple PCB layout (Altium Designer/Eagle PCB) and soldering.

Hands-on experience of workbench tools: oscilloscopes, function generator and spectrum analyzer etc.

Knowledge of EMI/EMC concept and test procedures for product design.

Documentation with LaTeXand Microsoft Office.

Knowledge of Agile Development.

Publications

Xia Lixun, Liao Bin, "Hardware Platform For Active Acoustic Spectroscopy Sensors", Chalmers University of Technologgy, 2010.

Su Mei, Xia Lixun, Sun Yao, et al "Carrier modulation of four-leg matrix converter based on FPGA", Electrical Machines and Systems, 2008. ICEMS 2008. IEEE International Conference on. pp.1247-1250.

Yao Sun, Mei Su, Lixun Xia, et al "Randomized carrier modulation for four-leg matrix converter based on optimal Markov chain", Industrial Technology, 2008. ICIT 2008. IEEE International Conference on. pp.1-6.

Hengsi Qin, Mei Su, Lixun Xia, et al "A novel controller design method for power converters", IEEE 11th Workshop on Control and Modeling for Power Electronics, 2008. COMPEL 2008. IEEE International Conference on.

Social Services

Translation of the *6.334 Power Electronics* of Open Courseware(OCW) Project for China Open Resources for Education(CORE).