John Anthony Edwards, CEng BEng(Hons) MIET MIEEE

Leicestershire, UK | jedwards@numerix-dsp.com | linkedin.com/in/johnedwards

Professional Summary

Chartered Engineer with over 40 years' experience designing, implementing, and teaching Digital Signal Processing (DSP), audio, and wireless communications systems. Founder of Numerix DSP and creator of the SigLib DSP library. Extensive background in field applications engineering, DSP algorithm development, embedded systems, and professional training.

Self-Evaluation

I am exceptionally self-motivated, performing very well under pressure, in time and business critical situations. I have excellent organizational and communication skills and I am able to liaise with both company personnel and customers at all levels. I am able to work as part of and lead a team by motivation and delegation. I enjoy teaching and sharing my knowledge with others.

Key Skills

- Digital Signal Processing (DSP), Audio, Wireless PHY (3G, LTE, WiMAX)
- Embedded Systems, Real-Time Systems, DSP Assembly and C/C++
- Voice User Interfaces, USB Audio, Sample Rate Conversion, AEC
- Technical Leadership, Customer Support, Due Diligence
- Professional Training and University-Level Teaching

Professional Experience

1. Numerix DSP – Founder & Principal Consultant (1995–Present)

Founded and operate a specialist DSP consultancy. Developed and marketed the SigLib DSP and Machine Learning library. Deliver professional DSP training and consultancy across audio, communications, and embedded systems.

https://numerix-dsp.com/

2. XMOS Ltd – Senior Field Applications Engineer, Europe (2013–2020)

Supported global DSP, voice, and audio customers, including the two largest customers in XMOS history. Architect and co-author of DSP and Audio Effects Libraries. Led algorithm development for voice processing modules including DOA, AEC delay estimation, and noise detection.

3. Picochip Ltd / Mindspeed – Senior Field Applications Engineer (2007–2013)

Provided technical leadership for WiMAX, WCDMA, and LTE PHY solutions. Delivered training, hardware reviews, and protocol stack support. European region achieved highest global sales revenue during tenure.

4. DSP Contractor (2006–2007)

Consulting roles including vibration monitoring for Rolls-Royce Gas Turbines, modem development for LA Department of Public Works, and vibration measurement systems for ZF Lenksysteme.

Education & Professional Development

BEng (Hons) Electrical & Electronic Engineering – University of Bradford
Chartered Engineer (CEng), Member of IET and IEEE

Technical Experience

I have worked on many large software projects, both individually and as part of a team. The largest individually developed projects have been 18,000 line MSDOS C and 10,000 line DSP96002 assembly language programs.
Wireless and Wireline MODEMs and VOIP Telecommunications algorithms.
Experienced with High level Languages, Assembly code, Operating Systems and real time kernels and web APIs.
Experienced user of Project Management and Version Control programs.

Management Experience

Managed pre and post sales technical support teams and implemented and managed the ISO9001 procedures for the Applications Group at LSI/BWS/Motorola. Managed and organized annual company distributor and FAE technical training conferences.

Teaching & Speaking

DSP lecturer for University of Oxford professional short courses since 1993. Former visiting lecturer at Loughborough University. Regular international conference speaker on DSP, SDR, and wireless communications.

Additional Information

Interests include canoe slalom (former England international), helicopter flying (PPL-H), music, and outdoor sports.

References

Professional and personal references can be provided on request.