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EDUCATION

Technician: Demirtaspasa Technical College, Bursa, TR, Electrical Department, 1980.
BSc : Yildiz Technical University, Istanbul, TR, Electronics & Telecom. Eng., 1984.
Final year project: Design and implementation of auto-test device to measure engine performance.
MSc : Yildiz Technical University, Istanbul, TR, Electronics & Telecom. Eng., 1987.
MSc project: Design and implementation of data-acquisition system for IBM-PC.
PhD : University of Leicester, Leicester, UK, Department of Medical Physics, 1994.
During my PhD research, I have designed and implemented a Computerized Arterial graft Monitor. It involved in designing and implementing a Doppler demodulator plug in board for PC (board consisted of mixers, filters, and an Altera FPGA), developing and implementing novel digital demodulation and FFT algorithms for DSP32C (produced by Lucent (then AT&T)) floating point processor, and developing and implementing user interface for the complete system.

WORK EXPERIENCE

2006- Present : Professor, Faculty of Engineering, Bahçeşehir University, TURKEY.
2004- 2006 : Associate Professor, Faculty of Engineering, Bahçeşehir University, TURKEY.
2001- 2004 : Senior Research Fellow, School of Engineering & Electronics, University of Edinburgh, UK.
As a member of the System Level Integration Group within the Institute for Micro and Nano Systems, I am involved in low power SoC design, development of digital communication algorithms, and communication protocols. I designed a spread-spectrum digital communication system for an ingestible capsule. I also designed some computational ASIC systems, such as complex Wavelet transform processor, which employs bank of correlators. I also supervised a number of students in Institute of System Level Integration, Livingstone. I have also developed wavelet based DSP algorithms to process the Doppler signals obtained from patients under shock.
2000-2001: Postdoctoral Research Fellow, St Georges Hospital Medical School, University of London, UK.
Involved in theoretical and practical digital signal processing research. I proposed a complex wavelet transform algorithm for processing complex quadrature signals, which earned me prestigious the IEE Premium Award for 2000/2001, and designed a novel Fast wavelet transform based online embolic Doppler signal analysis and detection system. I also provided computing and IT support to the department.
1998-2000: Postdoctoral Research Fellow, Department of Clinical Neurosciences, King's College, UK.
Conducted research for enhancement of FFT based embolic Doppler signal processing algorithms applications of wavelet transform for analysis and detection of embolic signals and provided computing and IT support.
1995-1999: Assistant Professor (Associate Professor, November 1999), Electronics Engineering Department, Gebze Institute of Technology, TR.
Involved in teaching, student supervision, consultancy, and various research.
1994-1995: Research Scientist, Department of Medical Physics, Leicester Royal Infirmary, UK.
Developed digital signal processing algorithms using Lucent (AT&T) DSP32C floating point processor (demodulation, time-frequency analysis, etc) for processing quadrature Doppler signals.
1986-1989: Teaching & Research Assistant, Electrical Eng. Department, Yildiz Technical University, TR.
Involved in some teaching and supervision of electronic circuits, measurement and instrumentation, and digital design labs.
1983 Summer: Trainee, ULKER Food Industry, Electronics Workshop, Istanbul, TR.
1982 Summer: Trainee, TUGSAS Artificial Fertiliser Industry, Electronics Workshop, Gemlik, TR.

1980 Summer: Trainee, MERINOS Textile Industry, Electrical Workshop, Bursa, TR.

1979 Summer: Trainee, KAV Match Industry, Electrical Workshop, Orhangazi, TR.

PUBLICATIONS

Published in 2006

1. Temel T, Morgul A, **Aydin N**, " A novel signed higher-radix full-adder algorithm and implementation with current-mode multi-valued logic circuits ". *IEE Proc.-Circuits Devices Syst.*, Vol. 153, No. 5, 489-496, October 2006.
2. **Aydin N**, "Processing of Complex Quadrature Signals". *ECSIS Symposium on Intelligent Systems for Defense and Security (ISDS)*, Iasi, September 2006.
3. Kaleli F, **Aydin N**, "A Region based thresholding Algorithm for Segmenting of Axial MR Breast Images ". *European Conference on Intelligent Systems and Technologies (ECIT 2006)*, Iasi, September 2006.
4. Bale K, Chapman P, Purdy J, **Aydin N**, Dark P, "Kaleidomap Visualizations of Cardiovascular Function in Critical Care Medicine". *International Conference on Medical Information Visualisation--BioMedical Visualisation (MedVis'06)*, 51-58, 2006.
5. **Aydin N**, Arslan T, "Power Driven Reconfigurable Complex Continuous Wavelet Transform". *Proc. 1st NASA/ESA Conference on Adaptive Hardware and Systems (AHS-2006)*, Istanbul, 109 – 113, June 2006
6. Wang L, **Aydin N**, Astaras A, Ahmadian M, Hammond PA, Tang TB, Johannessen E, Arslan T, Beaumont SP, "A Sensor System on Chip for Wireless Microsystems". *IEEE 2006 International Symposium on Circuits and Systems (ISCAS 2006)*, Kos, May 2006.
7. Ceylan M, Özbay Y, **Aydin N**, "Kompleks Değerli Yapay Sinir Ağı Kullanılarak Embolik Doppler Ultrason Sinyallerinin Dedeksiyonu". *Proc. Biyomut 2006, National Biomedical Engineering Meeting*, Istanbul, May 2006.
8. **Aydin N**, "Venous Air Embolism: Detection via Wavelet Transform," In *Wiley Encyclopedia of Biomedical Engineering* (Metin Akay, ed.) Hoboken: John Wiley & Sons, Inc., 2006.

Published in 2005

9. **Aydin N**, Arslan T, Cumming DRS, "A Direct Sequence Spread-spectrum Communication System for Integrated Sensor Microsystems". *IEEE Trans Inf Tech Biomed.* 9, 1, 4-12, 2005.
10. Revett K, **Aydin N**, "Attribute Extraction and Classification Using Rough Sets on a Lymphoma Dataset". *Proc. International Symposium on Health Informatics and Bioinformatics (HIBIT 2005)*, Antalya, 93-97, November 2005.
11. **Aydin N**, "A Fourier Domain Method for Recovering SSB Signals from Baseband Equivalents". *Proc. 9th International Research/Expert Conference - Trends in The Development of Machinery and Associated Technologies (TMT 2005)*, Istanbul, 1483-1486, September 2005.
12. **Aydin N**, "Complex Wavelet Transform for Processing Complex Quadrature Doppler Signals". *Proc. International Workshop on Applications of Wavelets to Real World Problems(IWW 2005)*, Istanbul, 221-232, July 2005.
13. Ceylan M, Özbay Y, **Aydin N**, "Kompleks Değerli Yapay Sinir Ağı Kullanılarak Doppler Sinyallerinden Yön Bilgisinin Çıkarılması". *Proc. Biyomut 2005, National Biomedical Engineering Meeting*, Istanbul, May 2005.

Published in 2004

14. **Aydin N**, Marvasti F, Markus HS, " Embolic Doppler ultrasound signal detection using discrete wavelet transform". *IEEE Trans InfTech Biomed.* 8, 2, 182-190, 2004.
15. Temel T, Morgul A, **Aydin N**, "A novel signed higher-radix full-adder algorithm and implementation with current-mode multi-valued logic circuits". *IEEE Euromicro Symposium on Digital System Design*, Paris, 80-87, September 2004.
16. Pai A, Khawam S, **Aydin N**, Arslan T, Benkrid K, "A 2-D systolic motion estimation architecture on a domain-specific reconfigurable substrate ". *Irish Signals and Systems Conference (ISSC'04)*, Belfast, July 2004.
17. Khawam S, Baloch S, Pai A, Ahmed I, **Aydin N**, Arslan T, Westall F, "Efficient Implementations of Mobile Video Computations on Domain-Specific Reconfigurable Arrays ". *Design, Automation and Test in Europe Conference (DATE 04)*, Paris, 1230-1235, February 2004.

Published in 2003

18. **Aydin N**, Astaras A, Wang L, Arslan T, Murray AF, Beaumont SP, Cumming DRS, "Design and implementation considerations for an advanced wireless interface in miniaturized integrated sensor microsystems". *25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Cancun, 3400-3402, September 2003.

19. **Aydin N**, Arslan T, Cumming DRS, "The design of optimized programmable transmitter and receiver architectures for an integrated sensor microsystem". *16th Annual IEEE International ASIC/SOC Conference*, Portland, 71-74, September 2003.
20. **Aydin N**, Arslan T, Cumming DRS, "Power/area analysis and optimization of a DS-SS receiver for an integrated sensor microsystem". *IEEE Euromicro Symposium on Digital System Design*, Antalya, 402-408, September 2003.
21. **Aydin N**, "Frequency and Scale Domain Analysis of Complex Quadrature Embolic Doppler Ultrasound Signals". *IEEE 3rd International Symposium on Image and Signal Processing and Analysis*, Rome, 888-891, September 2003.
22. **Aydin N**, Arslan T, Murray AF, "Identification and Detection of Embolic Doppler Signals Using DWT and Fuzzy Logic". *Proc. International Fuzzy systems World Congress (IFSA 2003)*, Istanbul, 119-122, June 2003.
23. **Aydin N**, Arslan T, Cumming DRS, "Direct sequence CDMA based wireless interface for an integrated sensor microsystem". *Proc. 4th Annual IEEE EMBS Special Topic Conference on Information Technology Applications in Biomedicine (ITAB2003)*, Birmingham, 370-373, April 2003.

Published in 2002

24. **Aydin N**, "Time-frequency and time-scale analysis of embolic signals". In *Mathematics of Signal Processing V*, Ed: Mcwhirter JG and Proudler IK, Oxford University Press, Oxford, pp. 241-254, 2002.
25. Astaras A, Ahmadian M, **Aydin N**, Cui L, Johannessen E, Tang TB, Wang L, Arslan T, Beaumont SP, Flynn BW, Murray AF, Reid SW, Yam P, Cooper JM, and Cumming DRS, "A miniature integrated electronics sensor capsule for real-time monitoring of the gastrointestinal tract (IDEAS)". *Proc. of the IEEE ICBME Conference*, Singapore, December 2002.
26. Johannessen EA, Tang TB, Wang L, Cui L, Ahmadian M, **Aydin N**, Astaras A, Murray AF, Flynn BW, Arslan T, Beaumont SP, Cumming DRS, and Cooper JM, "An ingestible electronic pill for real time analytical measurements of the gastrointestinal tract". *Proc. of the mTAS 2002 Symposium*, Japan, 181-183, 2002.
27. **Aydin N**, Arslan T, Cumming DRS, "Design and implementation of a spread spectrum based communication system for an ingestible capsule". *Proc. 24th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Houston, 1773-1774, 2002.
28. **Aydin N**, Marvasti F, Markus HS, "Effect of wavelet denoising on time-frequency and time-scale analysis of quadrature embolic signals". *Proc. 24th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Houston, 80-81, 2002.
29. **Aydin N**, Purdy J, Dark P, "Localizing systolic ejection within a trans-esophageal CW Doppler ultrasound aortovolographic waveform". *Proc. 24th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Houston, 1315-1316, 2002.
30. **Aydin N**, Arslan T, Cumming DRS, "A spread spectrum based communication system for an integrated sensor microsystem". *Proc. 15th Annual IEEE International ASIC/SOC Conference*, Rochester, 336-340, 2002.

Published in 2001

31. Seker H, Evans DH, **Aydin N**, Yazgan E, "Compensatory fuzzy neural network based intelligent detection of abnormal neonatal cerebral Doppler ultrasound waveforms". *IEEE Trans Inf Tech Biomed.* 5, 3, 187-194, 2001.
32. **Aydin N**, Markus HS, "Time-scale analysis of quadrature Doppler ultrasound signals". *IEE Proceedings - Science, Measurement and Technology.* 148, 1, 15-22, 2001.
33. **Aydin N**, Marvasti F, Markus HS, "Detection and estimation of embolic Doppler signals using discrete wavelet transform". *Proc. IEEE ICASSP 2001*, Salt Lake City, 1049-1052, 2001.
34. Seker H, Evans DH, Yazgan E, **Aydin N**, Naguip RG, "Intelligent detection of abnormal neonatal cerebral haemodynamics in a neonatal intensive care environment". *Proc. 23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Istanbul, 1612 -1614, 2001.
35. Astaras A, Ahmadian M, **Aydin N**, Farooq I, Holgate M , Johannessen E, Tang TB, Wang L, Arslan T, Beaumont SP, Casey J, Cooper JM, Dickman P, Flynn BW, Murray AF, "IDEAS: Miniature Lab-in-a-pill sensor system", *The SET for Britain Conference*, 2001.

Published in 2000

36. **Aydin N**, Markus HS, "Directional wavelet transform in the context of complex quadrature Doppler signals". *IEEE Signal Processing Letters.* 10, 7, 278-280, 2000.
37. **Aydin N**, Markus HS, "Optimisation of processing parameters for the analysis and detection of embolic signals". *European Journal of Ultrasound.* 12, 1, 69-79, 2000.
38. **Aydin N**, "Time varying filtering approach for simulation of ultrasonic Doppler signals". *Journal of Computer Simulation & Modelling in Medicine.* 1, 1, 67-76, 2000.

39. **Aydin N**, Markus HS, "Time-frequency and time-scale analysis of embolic signals". Proc. 5th IMA *International Conference on Mathematics in Signal Processing*, Warwick, December 2000.
40. **Aydin N**, Markus HS, "A comparison of time-frequency and time-scale analysis of embolic signals". Proc. *14TH International Conference on Systems Engineering (ICSE 2000)*, Coventry, 28-30, 2000.
41. **Aydin N**, Markus HS, "Optimisation of processing parameters for the analysis and detection of embolic signals". Proc. *14TH International Conference on Systems Engineering (ICSE 2000)*, Coventry, 31-35, 2000.
42. **Aydin N**, Markus HS, "Wavelet analysis of quadrature Doppler ultrasound signals". Proc. *IEE International Conference on Medical Signal and Information Processing (MEDSIP '2000)*. Bristol, 251-256, 2000.
43. **Aydin N**, Markus HS, "Analysis of low intensity embolic signals using continuous wavelet transform". *St George's Cardiovascular Research Group 6th Research Open Day*, London, October 2000.
44. **Aydin N**, Marvasti F, Markus HS, "Embolic signal detection and classification using discrete wavelet transform". *St George's Cardiovascular Research Group 6th Research Open Day*, London, October 2000.

Published in 1999

45. **Aydin N**, Padayachee S, Markus HS, "The use of the wavelet transform to describe embolic signals". *Ultrasound Med Biol.* 25, 6, 953-958, 1999.
46. **Aydin N**, Markus HS, "Analysis of low intensity embolic signals using wavelet transform". Proc. 3rd *International Workshop on Biosignal Interpretation (BSI99)*, Chicago, 257-260, 1999.
47. **Aydin N**, Markus HS, "Detection of embolic signals using wavelet transform". Proc. *IEEE-EURASIP Workshop on Non-linear Signal and Image Processing (NSIP'99)*, vol 2, Antalya, 774-778, 1999.
48. Babayigit H, Seker H, **Aydin N**, "Determination of blood flow direction from quadrature Doppler signals", Proc. *IEEE Turkish Chapter Signal Processing and Applications Conference (SIU'99)*, Ankara, 1999. (In Turkish)
49. **Aydin N**, Ardogan M, "Time varying filtering approach for simulation of ultrasonic Doppler signals". *Simulation and Modelling Techniques Applied to Medicine Meeting*, London, November 1999.
50. **Aydin N**, Markus HS, "The use of the wavelet transform to describe embolic signals". *4th Meeting of the European Society of Neurosonology and Cerebral Hemodynamics*, Venice, 9 (supl 2), 7, April 1999.
51. **Aydin N**, Markus HS, "Detection of embolic signals using wavelet transform". *Wavelets : The Key to Intermittent Information, Discussion Meeting, The ROYAL SOCIETY*, London, February 1999.

Published in 1998

52. Seker H, **Aydin N**, Yazgan E, "Wavelet based signal reconstruction for quadrature signals in Doppler ultrasound". Proc. *the IEEE 2nd International Conference, Biomedical Engineering Days*, Istanbul, 60-61, May 1998.
53. Ardogan M, **Aydin N**, "Simulation of time varying filter implementation". Proc. *IEEE Turkish Chapter Signal Processing and Applications Conference (SIU'98)*, Ankara, 519-524, 1998. (In Turkish)
54. Kisacik M, **Aydin N**, "Maximum frequency envelope detection from Doppler ultrasound sonograms". Proc. *IEEE Turkish Chapter Signal Processing and Applications Conference (SIU'98)*, Ankara, 1998. (In Turkish)

Published in 1997

55. **Aydin N**, "Decoding directional information encoded in quadrature signals in frequency domain". Proc. *IEEE Turkish Chapter Signal Processing and Applications Conference (SIU'97)*, Kusadasi, 190-195, 1997. (In Turkish)
56. **Aydin N**, "A geometric method for detection of maximum frequency envelope". Proc. *IEEE Turkish Chapter Signal Processing and Applications Conference (SIU'97)*, Kusadasi, 110-114, 1997. (In Turkish)

Published in 1996

57. **Aydin N**, Gedikbey B, Aydin OB, Ardogan M, "Digital signal processing methods for decoding quadrature Doppler signals". Proc. *IEEE Turkish Chapter Signal Processing and Applications Conference (SIU '96)*, Kemer, 269-274, 1996. (In Turkish)
58. **Aydin N**, Evans DH, "A fast frequency domain algorithm for decoding quadrature Doppler signals". Proc. *18th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Amsterdam, vol 18, 993-994, 1996.

Published in 1995

59. **Aydin N**, "Design and implementation of a computerised arterial graft monitoring system". Proc. *Biyomut 95, National Biomedical Engineering Meeting*, Istanbul, 130-133, 1995. (In Turkish)
60. Moraes R, **Aydin N**, Evans DH, "The performance of three maximum frequency envelope detection algorithms for Doppler signals". *Journal of Vascular Investigation.* 1, 3, 126-134, 1995.
61. **Aydin N**, Evans DH, "A computerised arterial graft monitoring system". *Journal of Vascular Investigation.* 1, 2, 68-74, 1995.

62. Thrush AJ, **Aydin N**, Nydahl S and Evans DH, "A new on - line automated system for monitoring lower limb bypass grafts". *Journal of Ultrasound in Medicine, Proc. 39th American Institute of Ultrasound in Medicine Annual Convention*, San Francisco, 14 (supl 3), S35, March 1995.

Published in 1994

63. **Aydin N**, Fan L, Evans DH, "Quadrature-to-directional format conversion of Doppler signals using digital methods". *Physiol Meas*, 15, 181-199, 1994.
64. **Aydin N**, Evans DH, "Implementation of directional Doppler techniques using a digital signal processor". *Med Biol Eng Comput*, 32, S157-S164, 1994.
65. Evans DH, **Aydin N**, Thrush AJ and Nydahl S, "A computerised arterial graft monitoring system". *Proc. 5th International Conference on Biomedical Engineering*, Singapore, 294-296, December 1994.
66. Thrush AJ, **Aydin N**, Nydahl S and Evans DH, "A new on - line automated system for monitoring lower limb bypass grafts". *EURODOP 94*, Oxford, 1994.

Doctoral Thesis

Aydin N, "Computerised graft monitoring". Ph.D.dissertation, Dept. Med. Phys., *University of Leicester*, Leicester, UK, 1994.

Invited Lectures/Seminars

Aydin N, "Time-frequency and time-scale analysis of embolic signals". Department of Engineering, *University of Leicester*, Leicester, UK, 20 May 1999.

AWARDS & ACHIEVEMENTS

The IEE the Institute Premium Award for 2000/2001, awarded by the Institute of Electrical Engineers, UK.

Best Presentation Award, St George's Cardiovascular Research Committee, London, October 2000.

Associate Professorship in Electronics, awarded by the Turkish Council of Higher Education, November 1999.

Graduate Scholarship, awarded by the Turkish Petroleum Foundation for graduate studies, 1985 – 1987.

Undergrad. Scholarship, awarded by the Turkish Petroleum Foundation for undergraduate studies, 1980 – 1984.

ADMINISTRATIVE & ORGANIZATIONAL EXPERIENCES

Associate Editor, IEEE Trans. Information Technology in Biomedicine, since Jan. 2003.

Member of the Senatus Academicus of the University of Edinburgh, since Oct. 2002.

Deputy Head of Electronic Engineering Department, Gebze Institute of Technology, TR, 1995-1998.

Professional Qualifications

Member of Turkish Chapter of IEEE Signal Processing Society, since 1995.

Member of Turkish Chapter of IEEE Computer Society, since 1995.

Member of IEEE Signal Processing Society, since 1992.

Member of IEEE Engineering in Medicine and Biology Society, since 1992.

Member of Turkish Chamber of Electrical Engineers, since 1985.

Refereed for International Journals and Conferences

IEEE Transactions on Biomedical Engineering

IEEE Transaction on Information Technology in Biomedicine

IEEE Transaction on Dielectrics and Electrical Insulation

IEEE EMBS Magazine

IEEE Signal Processing Letters

IEE Proceedings, Science, Measurement and Technology

Medical Engineering and Physics

Computers & Electrical Engineering

IEEE ISCISS Conference 2003

IEEE ASIC/SOC Conference 2003

IEEE SOC Conference 2004

GRANTS AND CONTRACTS

Current grants

Cooperative immersive visualization techniques for the interpretation of cardiovascular function in critical care medicine, EPSRC (GR/S82190), 2004 (for 24 months). (In collaboration with Dr. P. Dark (Department of Critical Care Medicine, University of Manchester), Dr. P. Chapman (Computer Science Department, University of Hull), and Dr. J. Purdy (Computer Science Department, University of Hull)).

Past grants

Developing and evaluating an automated embolic signal detection system based on wavelet processing, British Heart Foundation (PG/99064), 1999-2002. (In collaboration with Prof. H. Marcus (St Georges Hospital, Department of Clinical Neuroscience, University of London), and Dr. F. Marvasti (Electronics Engineering Department, Kings College London)).

Fuzzy C-Means Based Clustering Algorithms Approach to Magnetic Resonance Image Segmentation, Gebze Institute of Technology, University Research Committee, 1997-1998. (In collaboration with Dr. M. Esin and H. Seker)

Development and implementation of multi-frequency Doppler System, Gebze Institute of Technology, University Research Committee, 1995-1997.

RESEARCH INTERESTS

Time-frequency/scale analysis, Fourier, Hilbert, and wavelet transform applications

Low power digital design, VLSI, ASIC/SoC design, reconfigurable architectures

Integrated sensor micro systems, wireless implantable sensors

Digital communications, spread spectrum/CDMA systems, wireless communication, communication protocols

Biomedical signal/image processing and instrumentation, signal detection and estimation

Bioinformatics, wireless applications in healthcare technologies, miniaturized medical instrumentation

Doppler ultrasound, non-invasive measurement/sensor systems

Embolic signal estimation and detection by using wavelet transform

Complex wavelet transform and complex neural network applications in ultrasound

Analysis and classification of Doppler signals recorded after shock (trauma)

STUDENT SUPERVISION (MSc or PhD)

In the Institute for System Level Integration, Livingstone: 2002/2004

Design and implementation of low-power reconfigurable discrete complex wavelet transform algorithms for biomedical and telecommunications applications
Low power implementation of quadrature digital oscillators

Implementation of low power coding architectures/IPs for an integrated microsensor.

Reconfigurable Blocks For Discrete Cosine Transform Applications.

High Performance Reconfigurable Low Power SoC Architecture for Mobile Platforms.

System Integration of Reconfigurable Blocks (DCT and Motion Estimation Reconfigurable blocks with microprocessor based platform).

Design and Implementation of a Complex Continuous Wavelet Transform on a Reconfigurable Platform for Real-time Operation

VHDL based FPGA design for a Laser/Tracker detector system.

In the Electronics Engineering Department, Gebze Institute of Technology:

CW Doppler effect blood velocity monitoring system, 1995/96.

A DSP based telephone answering system, 1996/1997.

Kalman filter algorithm for generalized moving windowing, 1996/97.

Classification of ECG signals by using artificial neural networks, 1996/97.

Time-frequency analysis of Doppler signals, 1997/98.

A real time Doppler signal simulator, 1997/1998.

Comparison of maximum frequency envelope detectors for Doppler signals, 1997/98.

Active noise control with DSP, 1996/98.

Wavelet Transform applications to analyze Doppler ultrasound signals from lower limb arteries, 1996/98.

SOME COURSES TAUGHT

Undergraduate

Electronic Circuits & Systems

Circuit Theory
Advanced Microprocessors
Digital Circuits & Design
Electrical & Electronics measurements & systems
Introduction to Computer Sciences and Information Technology

Graduate

Applied Digital Signal Processing
Statistical Signal Processing
Image Processing Fundamentals
Principles of Doppler Ultrasound
Principles of Computerized Tomographic Imaging
EMC Fundamentals
Numerical Methods Using MAPLE
Technical English

TECHNICAL SKILLS

Operating Systems: Unix, Linux, Windows

Programming Languages: Verilog/VHDL, C/C++, Java, MATLAB/SIMULINK, MAPLE

Packages/Design software: Office, Cadence and Synopsis design tools, LaTeX, Hypersignal, MAX+PLUS II