Eduardo (Ed) Casas
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Fields of Interest

Channel modeling, modulation and coding for wireless communication; digital signal processing; digital logic design; software development.

Education

1984–1989	Ph.D. in Electrical Engineering University of British Columbia, Vancouver, British Columbia Thesis: *OFDM/FM for Mobile Radio Data Communication*.
1981–1983	Master of Engineering in Electrical Engineering McMaster University, Hamilton, Ontario Thesis: *Emergency Locator Transmitter (ELT) Signal Models and Frequency Estimation for the Search and Rescue Satellite (SARSAT)*.
1977–1981	Bachelor of Applied Science in Electrical Engineering *summa cum laude* University of Ottawa, Ottawa, Ontario

Employment

2013–	Instructor, Department of Electrical and Computer Engineering Technology British Columbia Institute of Technology, Burnaby, BC
2006–2009	Chief Engineer, Wireless Standards and Technology, Intel Corporation, Hillsboro, Oregon
2002–2004	Principal System Architect, Vivato Inc, Spokane, Washington
1998–2000	Assistant Professor, Department of Electrical and Computer Engineering, University of British Columbia, Vancouver, BC. Taught *Wireless Communications*, *Design of Digital and Microcomputer Systems*, *Digital Instrumentation for Mechanical Systems*, *Introduction to Microcomputers*, *Signals and Communications*, *Microcomputer System Design*, and *Digital Signal Processing*.
1993–1996	Sessional Lecturer, Department of Electrical Engineering, University of British Columbia.
1994–1995	Member of Technical Staff, MPR Teltech, Burnaby, BC.
1990–1991	Research Fellow, University of Adelaide, Adelaide, South Australia

Graduate Students Supervised

Youli Zhuang	M.A.Sc. thesis: *Performance Analysis of Destination Multiplexing for Wireless LANs*. Degree completed in 2004.
Kassim Olawale	M.A.Sc. thesis: *Application of Interference Cancellation to Third Generation Partnership Project Wireless Systems*. Degree completed in 2003.

Selected Publications

E. Casas, T. Chia, M. daSilva, Hujun Yin, Yang-Seok Choi, "Beam diversity for indoor WLAN systems." *Proceedings of the 58th IEEE Vehicular Technology Conference, Fall 2003*. pp. 3141–3144, October 2003.

B. Jose, Hujun Yin, P. Mehrotra, E. Casas, "MAC layer issues and challenges of using smart antennas with 802.11." *Proceedings of the 58th IEEE Vehicular Technology Conference, Fall 2003*. pp. 3169–3173, October 2003.

Y. Zhuang and E. Casas, "Performance Analysis of Destination Multiplexing for Wireless LANs," *Proceedings of the Seventh Canadian Workshop on Information Theory, June 3–6, 2001*, Vancouver, BC. pp. 96–99. June 2001.

Siavash Alamouti, John Lundell, and Ed Casas, "Reducing the Development Cycle for Third Generation Wireless Communications Systems with Parallel Simulations," *Embedded Systems Conference*, April 9-13, 2001, San Francisco, Class 542.

E. F. Casas and C. Leung, "OFDM for Data Communications over Mobile Radio FM Channels, Part II: Performance Improvement." *IEEE Transactions on Communications*, vol. 40, pp. 680–683, April 1992.

E. F. Casas and C. Leung, "OFDM for Data Communications over Mobile Radio FM Channels, Part I: Analysis and Experimental Results," *IEEE Transactions on Communications*, vol. 39, pp. 783–793, May 1991.

E. Casas and C. Leung, "A Simple Digital Fading Simulator for Mobile Radio," *IEEE Transactions on Vehicular Technology*, pp. 205–212, Aug. 1990.

E. F. Casas and C. R. Carter, "Two Methods of Spectral Estimation for SARSAT Signals," *IEEE Transactions on Aerospace and Electronic Systems*, vol. AES-21, no. 4, pp. 559–568, July 1985.

Selected Patents

Casas, et al., US Patent 7,765,599 "Multimedia transmitter, multimedia receiver, multimedia transmission system, and a method for securely transmitting multimedia content over a wireless link," July 27, 2010.

Casas, et al., US Patent 6,992,621, "Wireless communication and beam forming with passive beamformers," January 31, 2006.

Alamouti, et al., US Patent 5,933,421, "Method for frequency division duplex communications." August 3, 1999.