

Erhan A. İNCE

Department: Electrical and Electronic Engineering
Academic Title: Prof. Dr.
Employment Status: Full-time
Date and Place of Birth: 18/01/1969, Nicosia
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EDUCATION

Qualification	Major Field of Study	Degree Awarding Body/Institute	Year
Ph.D.	Telecommunications Eng.	Bradford University, UK.	1997
M.Sc.	Electrical and Electronic Eng.	Bucknell University, USA.	1992
B.Sc.	Electrical and Electronic Eng.	Bucknell University, USA.	1990

EMPLOYMENT

Academic Experience

Rank	Department	Institution	Years
Prof. Dr.	EENG	EMU	2016-To date
Assoc. Prof. Dr.	EENG	EMU	2007-To date
Assist Prof. Dr.	EENG	EMU	1998 -2007
Teaching Assistant	EENG	Bradford University	1997-1997
Teaching Assistant	EENG	Bucknell University	1990-1992

Administrative Positions:

Company/Organization	Job Title	Year
EMU Engineering Faculty	Member of Faculty Promotions Committee	2009-2010
EMU Engineering Faculty	Faculty contact for Public Relations Office	2010-To date
Faculty Engineering Council	Member	2013-2015

ACTIVITIES

Teaching and Research Activities

Courses taught in the last five Academic Years:

EENG112	Introduction to Programming	(4,1) 4	F2014, S2014,F2015
EENG212	Algorithms and Data Structures	(4,1) 4	F2010, S2010
EENG226	Signals & Systems	(4,1) 4	
EENG360	Communications I	(4,1) 4	F2010
EENG420	Digital Signal Processing	(4,1) 4	F2014, S 2014, F2015

Number of Postgraduate Thesis Supervised To Date

M.S.	23
Ph. D.	2

Selected Postgraduate Thesis Supervised or under Supervision:

Title	Level	Date if Submitted
1. Performance Analysis of Turbo Codes over Fading Channels with Additive White Gaussian and Impulsive Noise	Ph.D.	S2007

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2. Femtocell Configurations and Structure Optimization to Achieve Maximum DoF in Heterogeneous Networks	Ph.D.	F2015
3. LDPC Coded OFDM and It's Application to DVB-T2, DVB-S2 and IEEE 802.16e	M.S.	S2012
4. Priority Aware Frame Packing for OFDMA Systems in Distributed Permutation Mode	M.S.	S2013
5. M188: A New Preprocessor for Better Compression of Text and Transcription Files	M.S.	S2014

Other Activities: (Professional, Academic)

1. Chair of Laboratories Committee
2. Member of the Promotion and Social Activities Committee
3. Member of the ABET 2000 Committee
4. Chair of GDP Committee

External/Internal (Sponsored) Scientific Projects

1. A Hybrid Access Control System Making Use of Facial Feature Based Identification , Seed Money Project (EN-05-02-01), Amount of Funding: 4,000 USD
2. "En son teknoloji arkaplan modelleme teknikleri ve bu tekniklerin yol ve kavşaklardaki trafik analizi için kullanımı", Ministry of National Education and Culture (MEKB 290/115), Amount of Funding: 14,300 YTL

3. SoLveIT Android Application Development Project

SoLveIt is an advanced engineering calculator that provides standard calculator functions, an interface for complex arithmetic and conversions, a point grapher, a function grapher, a Fourier analysis interface and also solves linear equations and finds roots. It is free and is downloadable from Google Play Store. Currently has

PROFESSIONAL MEMBERSHIPS AND AWARDS

Membership to Professional Institutes/Societies:

1. Institute of Electrical and Electronic Engineering (IEEE), USA.
2. Turkish Cypriot Chamber of Electrical Engineers
3. Member of IEEE Signal Processing Society
4. Member of IEEE Communications Society

Awards:

- (1998) Best Poster Presentation Award for the 5th International Symposium on CSDSP, Sheffield, UK.
(1994) Commonwealth Scholarship for Postgraduate Studies
(1990) M.Sc. Scholarship from University of Bucknell
(1985) Fullbright Scholarship from USA for BS.
(1994) Kolordu's outstanding Military Service Shield

Percentage of time available for research or scholarly activities: %30

Percentage of time committed to the program: %70

PUBLICATIONS:

Books, Patents, Chapters, Journals, Conferences: 43

Book Chapters:

- [1] Erhan A. Ince, Nima S. Naraghi and Saameh G. Ebrahimi, "Background Subtraction and Lane Occupancy Analysis", Video Surveillance, INTECH Open Access Publisher, Chap. 6, ISBN: 978-953-307-436-8, Feb 2011.

Selected Journal Publications:

- [1] Erhan A. Ince, Nirmal S. Kambo, Syed A. Ali, "Efficient Expression and Bound for Pairwise Error Probability in Rayleigh Fading Channels, with Application to Union Bounds for Turbo Codes," *IEEE Communications Letters*, Vol.9, Issue 1, pp. 25-27, Jan 2005.
- [2] Syed A. Ali, Erhan A. Ince, "Closed Form Expression and Improved Bound on Pairwise Error Probability for Performance Analysis of Turbo Codes Over Rician Fading Channels," *IEEE Communications Letters*, Vol.10, Issue 8, pp. 599-601, Aug 2006.
- [3] Syed A. Ali, Nirmal S. Kambo, Erhan A. Ince, "Exact Expression and Tight Bound on Pairwise Error Probability for Performance Analysis of Turbo Codes Over Nakagami-m Fading Channels", *IEEE Communications Letters*, May 2007.
- [4] Erhan A. Ince and Syed Amjad Ali, "Rule Based Segmentation and Subject Identification Using Fiducial Features and Subspace Projection Methods", *J. of Comp.*, Vol. 2, No. 4, June 2007.
- [5] Erhan A. Ince, Runyi Yu, Aykut Hocanin, "Entropy-Based Subspace Separation for Multiple Frequency Estimation", *Elsevier Digital Signal Process.*, Vol.23, No. 1, pp. 30-37, 2013.
- [6] Runyi Yu, Erhan A. Ince, Aykut Hocanin, "Subspace Alignment and Separation for Multiple Frequency Estimation", *IEEE Signal Process. Lett.*, Vol. 22, No. 1, pp. 16-20, January 2015.

Selected International Conference Papers

- [1] Bahmani K, Ince E, "Priority-Aware Extended eOCSA Frame Packing Algorithm Evaluation in WiMAX Systems with Mixed VoIP and Data Traffic," 20th IEEE Symposium on Communications and Vehicular Technology, Nov 2013.
- [2] Erhan A. Ince, Edmond Nurellari, Leonardo O. IHEME, "Image Transmission over Fading Channels Using RS-CC Versus LDPC Coding", 10.2316/P.2011.759-012, SIP 2011.
- [3] Dushantha N. K. Jayakody, Leonardo O. IHEME, Erhan A. Ince, "Coded QPSK-OFDM for Data Transmission over Fading Channels", ICIAFS 2010, Dec 2010, pp.276-282.
- [4] Nima Seifnargarhi, Saameh G. Ebrahimi, Erhan A. Ince, "A novel traffic light signalling technique based on lane occupancy rates derived from surveillance video", ISCIS 2009, Sept 2009, pp.592-596.
- [5] Syed A. Ali and Erhan A. Ince, "Performance Analysis of Turbo Codes over Nakagami-m Fading Channels with Impulsive Noise", 18th IEEE Symp. On Personal Indoor and Mobile Communications, Sept 2007, pp. 1-4.
- [6] Syed A. Ali and Erhan A. Ince, "Performance Analysis of Turbo Codes over Rician Fading Channels with Impulsive Noise", ICT-MICC 2007, Kuala Lumpur Malaysia, May 2007, pp.102-106.
- [7] Erhan AliRiza Ince and Syed Amjad Ali, "An Adept Segmentation Algorithm and its Application to the Extraction of Local Regions Containing Fiducial Points", in 21st International Symposium on Computer and Information Sciences (ISCIS06), LNCS 4263, pp. 553-562, Nov 2006.
- [8] S. A. Ali & E. A. Ince, "Distribution Free Approximations to Pairwise Error Probability for Memoryless Fading Channels", 13th International Conference on Telecommunications, May 2006.
- [9] Syed A. Ali, Erhan A. Ince, "Pairwise Error Probability Expressions Over Fully Interleaved Nakagami-m Fading Channels and Their Use in Union Bounds for Turbo Codes," 6th International ITG-Conference on Source and Channel Coding + 4th International Symposium on Turbo Codes, April 2006.
- [10] Syed A. Ali, Nirmal Kambo, Erhan A. Ince, "A Simple Moment Based Approximation to Pairwise Error Probability for Memoryless Fading Channels," 16th International Symposium on Personal Indoor and Mobile Radio Communications, June 2005.
- [11] E. A. Ince, A. S. Awad, "Iterative Parallel Data Detection Versus Other Established De-Blurring Techniques", International Conference on Acoustics, Speech and Signal Processing, ICASSP 2001.

Paper Reviewer for

- SIU 2007, SIU2008
- EUSIPCO,
- IEEE-CL,
- TCAS-I,
- IEEE Trans. On Commun.,
- ISCIS06,
- ICC06.,
- ISCIS07,
- Computers & Electrical Engineering Journal (elsevier),
- Machine Vision and Applications,
- ICSCCW 2009,
- The Computer Journal (COMPJ), 2009,
- Turk J Elec Eng & Comp Sci.
- SIVP

Conference Committee Memberships:

- “Computer Vision Graphics and Intelligence” track of 22nd International Symposium on Computer and Information Sciences (ISCIS 07), (PCM)
- European Signal Processing Conference (EUSIPCO 2009), (TPCM)
- ISCIS 2009, (PCM)
- European Signal Processing Conference (EUSIPCO 2010), (TPCM)
- Member of the Technical Evaluation Committee for SIU 2013.
(Chair for Wireless Communications 4)
- Member of the Technical Program Committee for HONET-ICT 2013.
- HONET 2014, (TPCM).