Publications and Presentations of Dr. Tuncer Ören on

Understanding and misunderstanding

by Dr. Tuncer Ören

updated: 2022-10-02 (y-m-d)

Some statistics

		0	1	2	3	4	5	6	7	8	9	t	otal
	1.1:4:	4	1	2								7	
1990s	publications	4	l	2								/	
	meetings*	2	2	2			1		4		2		13
2000s	publications	1						1	1		2	5	
	meetings	2						2		1			5
				•									
2010s	publications		2	1	3	1	1	1		1		10	
	meetings		1										1
(scheduled) *without publication								pι	ıblio	catio	22		
							meetings					19	
								total					41

Major stages:

ringor stages.	
1990-1995	Understanding simulation software; program understanding
1997-2006	Understanding systems
2006-2008	Systems with understanding ability and understanding agents
2009-	Agents with ability to understand emotions; switchable understanding
2011-	Avoidance of misunderstanding
2015-	Enriching machine understanding paradigm
2016-	Exploring the synergy of machine understanding and all three aspects of agent-directed simulation (ADS)
2017-	Computational awareness

1990

- Ören, T.I., Abou-Rabia, O., King, D.G., Birta, L.G., Wendt, R.N. (1990) (Plenary Paper). Reverse Engineering in Simulation Program Understanding. In: Problem Solving by Simulation, A. Jávor (ed.) Proceedings of IMACS European Simulation Meeting, Esztergom, Hungary, August 28-30, 1990, pp. 35-41.
- Ören, T.I., Birta, L.G., Abou-Rabia, O., King, D.G., Wendt, R.N. (1990). E/Slam: A Software Understanding Environment for SLAM II Programs. In: Proceedings of European Simulation Multiconference, Erlangen-Nuremberg, Germany, June 10-13, 1990, SCS International, San Diego, CA, pp. 235-240.
- Ören, T.I., Wendt, N.R., Abou-Rabia, O., King, D.G., Birta, L.G. (1990). A Reverse Engineering Application for Simulation Program Understanding. In: Proceedings of the Bell Canada Quality Engineering Workshop II, Montreal, PQ, October 4-5, 1990. (Participation by invitation).
- Wendt, R.N., Ören, T.I., Birta, L.G. (1990). Knowledge Base for Slam II Understanding System, Volume 2 Rule Base. Technical Report (Prepared for Bell Canada). Computer Science Department, University of Ottawa, Ottawa, Ontario.

1990 May 31 - June 22, Münich, W. Germany

Siemens

Invited Seminars: A Program Understanding Environment for Simulation.

1990 October 3-5, Montreal, PQ

Bell Canada Quality Engineering Workshop (Participation by Invitation only),

Invited Presentations: - A Reverse Engineering Application for Simulation Program Understanding (with N.R. Wendt, O. Abou-Rabia, D.G. King, L.G. Birta)

1991

Sheng, G., Ören, T.I. (1991). Computer-Aided Software Understanding Systems to Enhance Confidence of Scientific Codes. In: Proceedings of the BIOMOVS (BIOspheric MOdel Validation Study) Symposium, Stockholm, Sweden, October 8-10, 1990. Swedish Radiation Protection Institute, Stockholm, Sweden, pp. 275-286.

1991 June 3 - June 14, Istanbul, Turkey

Technical University of Istanbul (ITU)

Under the auspices of the United Nations TOKTEN Program

Invited Seminars (in Turkish) on: - Artificial Intelligence in Software Engineering:

- Program Understanding Systems and Automatic Documentation of Programs in Natural Language

1991 November 29, Istanbul, Turkey

CASE Day, Turkish Association of UNIX Users

Invited Presentation: Program Understanding and Documentation Tools: Some Examples

(In Turkish - Program Anlama ve Belgeleme Araçları: Bazı Örnekler)

1992

Ören, T.I. (1992). Towards Program Understanding Systems. (Invited Plenary Paper). In: Proceedings of the First Turkish Symposium on Artificial Intelligence and Neural Networks, K. Oflazer, V. Akman, H.A. Guvenir, U. Halici (eds.), 25-26 June, 1992, Bilkent University, Ankara, Turkey, pp. 3-12.

Ören, T.I., Wendt, R.N., King, D.G., Abou-Rabia, O., Birta, L.G. (1992). A Template-Oriented Approach for Simulation Program Understanding. Mathematics and Computers in Simulation, 34: 219-229.

1992 June 25-27, Ankara, Turkey

Bilkent University, First Turkish Symposium on Artificial Intelligence and Neural Nets Invited Paper: Towards Program Understanding Systems

1992 December 28, Istanbul, Turkey

Tübitak (Turkish Scientific and Technical Research Institute) Marmara Research Centre Invited Seminar: Research Topics in Program Understanding

1995

1995 Sept. 27 - Oct. 1, Istanbul, Turkey

Informatics'95 (In Turkish: Bilisim'95), Turkish Informatics Society

Presentations: Program Understanding

1997

1997 January 9-11, San Marcos, Texas

2nd Workshop of the International Institute for General Systems Studies

Southwest Texas State University

Member of the International Program Committee

Invited Plenary Presentation: Understanding Systems: Systems Theoretic Foundations and Architectures

1997 January 16, Ottawa, Ontario, Canada

Master's Program in Systems Science, University of Ottawa

Invited Seminar: Computerized Understanding Systems: A Taxonomy and Performance Factors

1997 July 4, Gölcük, Turkey

Software Engineering Center of the Gölcük Naval Base

Presentation: Program Documentation and Program Understanding Systems

1997 September 9-18, Istanbul, Turkey

Summer School on Advanced Topics in Software Engineering

Sponsor: Tübitak - (Turkish Science and Technical Research Council), MRC (Marmara Research

Center) with the Support of Bogazici University

Lectures on: Program Understanding (September 18), ...

1999

1999 October 18-20, Kusadasi, Izmir, Turkey

14th International Symposium on Computer and Information Sciences (ISCIS 14)

Organized by Ege University, http://www.ege.edu.tr/iscis99

Invited Presentation: Understanding Systems: Foundations and Performance Factors

1999 November 29, Paris, France

University Paris Dauphine

CERIA (Centre d'ETude et de Recherche en Informatique)

<u>Invited Seminar</u>: A Basis for Computer-Aided Understanding: A Classification and Performance Factors

2000

Ören, T.I. (2000 – Invited Opening Paper). <u>Understanding: A Taxonomy and Performance Factors.</u> In: D. Thiel (ed.) Proc. of FOODSIM'2000, June 26-27, 2000, Nantes, France. SCS, San Diego, CA, pp. 3-10.

2000 May 13-20, Istanbul Turkey

ICAMES 2000 (International Cultural and Academic meeting of Engineering Students)

Bogazici University

Invited Presentation: Understanding

2000 July 3, Gebze-Kocaeli, Turkey

TÜBITAK - Marmara Research Center (MRC),

Information Technologies Research Institute (ITRI), Multimedia Group

Presentations: (In Turkish)

- Computer-Aided Understanding: Types and Performance Factors

2006

Ören, T.I. (2006). Systems with Understanding Ability. (In Turkish: <u>Anlama Yetenekli Dizgeler</u>) (terimler) In: Informatics Encyclopedia of Turkey (In Turkish: Türkiye Bilisim Ansiklopedisi), Papatya Yayincilik, Istanbul, Turkey, pp. 91-95.

2006 September 13, Ottawa, Ontario, Canada

Ottawa Student Chapter of SCS - Carleton University

Invited Seminar: Systems with Understanding Ability: Toward Advanced Agents

2006 September 22 - October 23, Barcelona, Spain

University of Barcelona (Universitat Autonoma de Barcelona)

A series of invited doctoral lectures (Barcelona Lectures) including:

Lecture 6 - Systems with understanding ability and understanding agents

2007

Ören, T.I., Ghasem-Aghaee, N., and L. Yilmaz (2007). <u>An Ontology-Based Dictionary of Understanding as a Basis for Software Agents with Understanding Abilities</u>. Proceedings of the Spring Simulation Multiconference (<u>SpringSim'07</u>). Norfolk, VA, March 25-29, 2007, pp. 19-27. (ISBN: 1-56555-313-6) (presentation)

2008

2008 October 4 - October 10, Ankara, Turkey
ODTÜ-TSK MODSIMMER Modeling and Simulation Research and Development Center
Under the sponsorship of <u>TÜBİTAK</u> (The Scientific and Technological Research Council of Turkey)
A series of invited research lectures (Ankara Lectures - in Turkish) including:
Lecture 6 - Anlama yetenekli dizge ve etmenlerinin temelleri ve ileri uygulamaları
(Systems and agents with understanding: Foundations and advanced applications)

2009

- Kazemifard, M., N. Ghasem-Aghaee, and T.I. Ören (2009). Agents with Ability to Understand Emotions. In: Simulation Series, vol. 41, no. 3, Proceedings of the Summer Computer Simulation Conference, July 13-16, 2009, Istanbul, Turkey. SCS, Dan Diego, CA, pp. 254-260.
- Ören, T.I., L. Yilmaz, M. Kazemifard, and N. Ghasem-Aghaee (2009). <u>Multi-understanding: A Basis for Switchable Understanding for Agents</u>. In: Simulation Series, vol. 41, no. 3, Proceedings of the Summer Computer Simulation Conference, July 13-16, 2009, Istanbul, Turkey. SCS, Dan Diego, CA, pp. 395-402

2011

- Kazemifard, M., N. Ghasem-Aghaee, B. Koenig, and T.I. Ören (2011). <u>Toward Effective Emotional</u>
 <u>Intelligence Simulation: Modeling Understanding Ability for Emotive Agents</u>. Proc. of 4th International Conference of Cognitive Science (ICCS), 2011 May 10-12, Tehran, Iran, pp. 154 (abstract).
- **Ören**, T.I. and L. Yilmaz (2011). <u>Semantic Agents with Understanding Abilities and Factors Affecting Misunderstanding</u>. In: A. Elci, M.T. Traore, and M.A. Orgun (eds.) Semantic Agent Systems: Foundations and Applications, Springer-Verlag. pp. 295-313.
- 2011 September 16-22, Changsha, China
 Invited seminars: Agents with understanding abilities and ways to avoid misunderstanding

2012

Ören, T.I. (2012). Evolution of the Discontinuity Concept in Modeling and Simulation: From Original Idea to Model Switching, Switchable Understanding, and Beyond. Special Issue of Simulation –The Transactions of SCS. Vol. 88, issue 9, Sept. 2012, pp. 1072-1079. DOI: 10.1177/0037549712458013

2013

- Kazemifard, M., Ghasem-Aghaee, N., Koenig, B.L. and T.I. **Ören** (2013). An Emotion Understanding Framework for Intelligent Agents based on Episodic and Semantic Memories. Journal of Autonomous Agents and Multi-Agent Systems. (DOI) 10.1007/s10458-012-9214-9 (Online first articles) (not included in the statistics). Published in 2014.
- Kazemifard, M. and T.I. **Ören** (2013). Toward Agents with Switchable Emotion Understanding Ability. (extended abstract). ICCS 2013 Fifth International Conference of Cognitive Science, May 7-9, Tehran, Iran.
- Ören, T.I. (2013). Makine Anlamasının 80'e Yakın Türü: İngilizce-Türkçe ve Türkçe-İngilizce Terimler (Glossary of Turkish and English "Machine Understanding" Terms), Bilişim: Türkiye Bilişim Derneği Dergisi, yıl 41, sayı 152, Mart 2013, s. 134-143.

Ören, T.I., Kazemifard, M. and Yilmaz, L. (2013). Machine understanding and avoidance of misunderstanding in agent-directed simulation and in emotional intelligence. Proceedings of SIMULTECH 2013, 3rd International Conf. on Simulation and Modeling Methodologies, Technologies and Applications. July 29-31, Reykjavik, Iceland. pp. 318-327.

2014

Kazemifard, M., Ghasem-Aghaee, N., Koenig, B.L. and T.I. Ören (2014). <u>An Emotion Understanding Framework for Intelligent Agents based on Episodic and Semantic Memories</u>. Journal of Autonomous Agents and Multi-Agent Systems. January 2014, Volume 28, <u>Issue 1</u>, pp 126-153. (DOI) 10.1007/s10458-012-9214-9 (Prepublication was in 2013 January – 2013-01)

2015

Ören, T.I., M. Kazemifard, and F. Noori (2015-<u>Feature article</u>). Agents with four categories of understanding abilities and their role in two-stage (deep) emotional intelligence simulation. International Journal of Modeling, Simulation, and Scientific Computing (<u>IJMSSC</u>), vol. 6, issue 3 (September), pp: 1-16, DOI: 10.1142/S1793962315400036.

2016

Ören, T., L. Yilmaz, N. Ghasem-Aghaee, M. Kazemifard, and F. Noori (2016 – Keynote presentation) Machine understanding in agent-directed simulation: State-of-the-art and research directions, 2016 Modeling and Simulation of Complexity in Intelligent, Adaptive and Autonomous Systems (MSCIAAS) Symposium within the SpringSim Conference, Pasadena, California, April 3-5, 2016.

2018

Ören, T. (2018). <u>Simulation of Cyber-Physical Systems of Systems: Some Research Areas – Computational Understanding, Awareness and Wisdom</u>. The Journal of Chinese Simulation Systems, year 2018, issue 2. DOI: 10.16182/j.issn1004731x.joss.201802002