

## **Prof. Takuhi Nadia Erdoan**

### **Personal Information**

**Office Phone:** [+90 212 285 3592](tel:+902122853592)

**Fax Phone:** [+90 212 285 3592](tel:+902122853592)

**Email:** nerdogan@itu.edu.tr

**Web:** <https://avesis.itu.edu.tr/nerdogan>

### **International Researcher IDs**

ORCID: 0000-0002-7719-1955

ScopusID: 56238886800

Yoksis Researcher ID: 4893

### **Education Information**

Doctorate, Istanbul Technical University, Turkey 1982 - 1987

Postgraduate, Bogazici University, Faculty Of Engineering, Department Of Computer Engineering, Turkey 1978 - 1980

Undergraduate, Bogazici University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, Turkey 1974 - 1978

### **Research Areas**

Engineering and Technology

### **Academic Titles / Tasks**

Professor, Istanbul Technical University, Bilgisayar ve Biliim, Bilgisayar Mühendisliği, 2012 - Continues

Professor, Istanbul Technical University, Bilgisayar ve Biliim, Bilgisayar Mühendisliği, 1981 - Continues

### **Published journal articles indexed by SCI, SSCI, and AHCI**

- I. **A knowledge-intensive adaptive business process management framework**  
Kir H., Erdogan T. N.  
Information Systems, vol.95, 2021 (SCI-Expanded)
- II. **Influential user weighted sentiment analysis on topic based microblogging community**  
ELİACİK A. B., Erdogan N.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.92, pp.403-418, 2018 (SCI-Expanded)
- III. **Network Load Balancing with Strong Migration in an Agent Based Grid System Using CSP Approach**  
Erdoan T. N.  
International Journal of Grid Computing & Applications, vol.3, no.4, pp.43-53, 2012 (SCI-Expanded)
- IV. **A Generic Framework for Distributed Multirobot Cooperation**  
Sariel-Talay S., BALCH T. R., Erdogan N.  
JOURNAL OF INTELLIGENT & ROBOTIC SYSTEMS, vol.63, no.2, pp.323-358, 2011 (SCI-Expanded)
- V. **Role models-implementation-based approaches to using roles**  
SELÇUK Y. E., Erdogan N.

- SOFTWARE-PRACTICE & EXPERIENCE, vol.41, no.1, pp.1-22, 2011 (SCI-Expanded)
- VI. Multiple Traveling Robot Problem: A Solution Based on Dynamic Task Selection and Robust Execution**  
 Sariel-Talay S., BALCH T. R., Erdogan N.  
 IEEE-ASME TRANSACTIONS ON MECHATRONICS, vol.14, no.2, pp.198-206, 2009 (SCI-Expanded)
- VII. Naval mine countermeasure missions - A distributed, incremental multirobot task selection scheme**  
 Sariel S., BALCH T., Erdogan N.  
 IEEE ROBOTICS & AUTOMATION MAGAZINE, vol.15, no.1, pp.45-52, 2008 (SCI-Expanded)
- VIII. A role model for description of agent behavior and coordination**  
 Selcuk Y. E., Erdogan N.  
 ENGINEERING SOCIETIES IN THE AGENTS WORLD VI, vol.3963, pp.29-48, 2006 (SCI-Expanded)
- IX. DCOBE: Distributed composite object-based environment**  
 Yilmaz G., Erdogan N.  
 COMPUTER JOURNAL, vol.48, no.3, pp.273-291, 2005 (SCI-Expanded)
- X. MAPSEC: Mobile-agent based publish/subscribe platform for electronic commerce**  
 Sahingoz O., Erdoan T. N.  
 COMPUTER AND INFORMATION SCIENCES - ISCIS 2003, vol.2869, pp.348-355, 2003 (SCI-Expanded)
- XI. Augmenting object persistency paradigm for faster server development**  
 Kemikli E., Erdoan T. N.  
 ADVANCES IN INFORMATION SYSTEMS, vol.2457, pp.327-335, 2002 (SCI-Expanded)

## Articles Published in Other Journals

- I. Topic Based Agent Migration Scheme via Publish/Subscribe Paradigm**  
 Karzan M. A., ERDOAN T. N.  
 International Journal of Information and Education Technology, vol.3, pp.290-294, 2013 (Scopus)
- II. Gerçek zamanlı çoklu robot çoklu hedef problemi için artımlı atama yöntemi**  
 SARIEL S., ERDOAN T. N., TUCKER B.  
 itu dergisi/d : muhendislik, vol.7, pp.41-54, 2008 (Peer-Reviewed Journal)
- III. A Two-Leveled Mobile Agent System for Electronic Commerce**  
 SAHINGÖZ Ö. K., ERDOAN T. N.  
 the journal of Aeronautics and Space Technologies Institute, pp.21-32, 2003 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. Multi-agent Based File Replication and Consistency Management**  
 AKDEMR S., ERDOAN T. N.  
 in: Progress in Artificial Intelligence, Oliveira E., Gama J., Vale Z., Lopes Cardoso H., Editor, Springer, Cham, pp.727-738, 2017
- II. Agent-Based Semantic Business Process Management Methodology**  
 KIR H., ERDOAN T. N.  
 in: Advances in Practical Applications of Scalable Multi-agent Systems, Demazeau, Y., Ito, T., Bajo, J., Escalona, M.J., Editor, Springer International Publishing, pp.145-156, 2016

## Refereed Congress / Symposium Publications in Proceedings

- I. Comparison of machine learning methods for software project effort estimation**  
 ERDOAN T. N., Yurdakurban V.

- 2018 26th Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- II. **Multi-agent Based File Replication and Consistency Management**  
Akdemir S., Erdogan N.  
18th EPIA Conference on Artificial Intelligence (EPIA), Porto, Portugal, 5 - 08 September 2017, vol.10423, pp.727-738
- III. **Agent-Based Semantic Business Process Management Methodology**  
Kir H., Erdogan N.  
14th International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS), Sevilla, Spain, 1 - 03 June 2016, vol.9662, pp.145-156
- IV. **User Weighted Sentiment Analysis for Financial Community on Twitter**  
ELİAÇIK B., ERDOĞAN T. N.  
11th International Conference on Innovations in Information Technology (IIT'15), 1 - 03 November 2015
- V. **User-Weighted Sentiment Analysis for Financial Community on Twitter**  
Eliacik A. B., Erdogan N.  
11th International Conference on Innovations in Information Technology (IIT), Dubai, United Arab Emirates, 1 - 03 November 2015, pp.46-51
- VI. **Mikro Bloglardaki Finans Toplulukları için Kullanıcı Ağırlıklandırılmış Duygu Analizi Yöntemi**  
Burak E., ERDOĞAN T. N.  
9th Ulusal Yazılım Mühendisliği Sempozyumu (UYMS'15), Turkey, 9 - 11 September 2015
- VII. **Object Based Distributed Data Sharing In Multi-Agent Environment**  
Pataci M., Erdogan N.  
5th IEEE International Conference on Software Engineering and Service Science (ICSESS), Beijing, China, 27 - 29 June 2014, pp.182-189
- VIII. **Virmon: A Virtualization-Based Automated Dynamic Malware Analysis System**  
HÜSEYİN T., ERDOĞAN T. N.  
6th INTERNATIONAL INFORMATION SECURITY CRYPTOLOGY CONFERENCE, 20 - 21 September 2013
- IX. **Parallel Genetic Algorithm to Solve Traveling Salesman Problem on MapReduce Framework using HARUN RASİT E., ERDOĞAN T. N.**  
The International Conference on Soft Computing and Software Engineering 2013 (SCSE'13), United States Of America, 1 - 02 March 2013
- X. **An Agent-based Framework for Personalized Advertisement on Mobile Devices**  
Sahin R., Erdogan N.  
2nd IEEE International Conference on Parallel, Distributed and Grid Computing (PDGC), Wakanaghat, India, 6 - 08 December 2012, pp.539-544
- XI. **LOGISTICS APPLICATION ON DISTRIBUTED COMPOSITE OBJECT BASED ENVIRONMENT**  
Nakhchivanski J., Yilmaz G., Erdogan N.  
4th International Conference on Computer and Electrical Engineering (ICCEE 2011), Singapore, Singapore, 14 - 15 October 2011, pp.153-154
- XII. **An Agent-Based Web Services Market**  
Durmus A., Erdogan N.  
7th International Conference on Software Engineering Research - Management and Applications, Haikou, China, 2 - 04 December 2009, vol.253, pp.145-157
- XIII. **A Web Services Market Framework with Role Based Agents**  
DURMUS A., Erdogan N.  
IEEE International Conference on Systems, Man and Cybernetics, San-Antonio, Northern Mariana Islands, 11 - 14 October 2009, pp.4722-4727
- XIV. **Enhancing Java RMI with Asynchrony through Reflection**  
Akin O., Erdogan N.  
1st International ICST Conference on Communications Infrastructure, Systems and Applications in Europe, London, Canada, 11 - 13 August 2009, vol.16, pp.23-34
- XV. **An integrated approach to solving the real-world multiple traveling robot problem**

- SARIEL S., ERDOĞAN T. N.  
5th international conference on electrical and electronics engineering, 4 - 06 November 2007
- XVI. Incremental multi-robot task selection for resource constrained and interrelated tasks  
Sariel S., Balch T., Erdogan N.  
2007 IEEE/RSJ International Conference on Intelligent Robots and Systems, IROS 2007, San Diego, CA, United States Of America, 29 October - 02 November 2007, pp.2314-2319
- XVII. Robust multi robot cooperation through dynamic task allocation and precaution routines  
SARIEL S., TUCKER B., ERDOĞAN T. N.  
ICINCO-RA, 1 - 03 August 2006
- XVIII. A role model for description of agent behavior and coordination  
SELÇUK Y. E., ERDOĞAN T. N.  
ESAW 2005, 26 - 28 October 2005, pp.29-48
- XIX. JAWIRO: Enhancing Java with roles  
SELÇUK Y. E., ERDOĞAN T. N.  
International Symposium on Computer and Information Sciences, 26 - 29 October 2004

## Supported Projects

Erdoğan T. N., Project Supported by Higher Education Institutions, AGRID AGENT BASED GRİD SYSTEM, 2010 - 2018  
Erdoğan T. N., Project Supported by Higher Education Institutions, A. WEB SERVICES MARKET FRAMEWORK WITH ROLE BASED AGENTS, 2009 - 2018  
Erdoğan T. N., Project Supported by Higher Education Institutions, Güvenli Hareket Etmen Mimarisi, 2005 - 2007  
Erdoğan T. N., Project Supported by Higher Education Institutions, Gezgin Etmen Tabanlı Dağıtılmış Yürütmeye Ortamı, 2004 - 2006

## Metrics

Publication: 35  
Citation (WoS): 116  
Citation (Scopus): 153  
H-Index (WoS): 4  
H-Index (Scopus): 6

## Non Academic Experience

İstanbul Teknik Üniversitesi  
Yıldız Teknik Üniversitesi