

Assoc. Prof. EROL ŞAHİN

Personal Information

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Education Information

Doctorate, Boston University, Cognitive And Neural Systems, United States Of America 1996 - 2000

Post Graduate, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, Turkey 1992 - 1994

Under Graduate, İhsan Doğramacı Bilkent Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1987 - 1991

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Visual object localization for mobile robots, Boston University, Cognitive And Neural Systems, 2000

Post Graduate, A New higher-order binary input neural unit : learning and generalizing effectively via using minimal number of monomials, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 1994

Research Areas

Computer Sciences, Artificial Intelligence, Computer Learning and Pattern Recognition, Neural Networks, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 2010 - Continues

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 2004 - 2010

Lecturer, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 2002 - 2004

Advising Theses

Kalkan S., Şahin E., ALET (Automated Labeling of Equipment and Tools): A Dataset for Tool Detection and Human

Worker Safety Detection, Post Graduate, F.CAN(Student), 2020

ŞAHİN E., KALKAN S., A grounded and contextualized web of concepts on a humanoid robot, Doctorate, H.ÇELİKKANAT(Student), 2015

ŞAHİN E., Perception, Learning and Use of Tool Affordances on Humanoid Robots, Post Graduate, Y.ÇALIŞKAN(Student), 2013

ŞAHİN E., A probabilistic geometric model of self-organized aggregation in swarm robotic systems, Doctorate, L.BAYINDIR(Student), 2012

ŞAHİN E., A developmental grasp learning scheme for humanoid robots, Post Graduate, A.KAAN(Student), 2012

ŞAHİN E., KALKAN S., Formation of adjective, noun and verb concepts through affordances, Post Graduate, O.YÜRÜTEN(Student), 2012

ŞAHİN E., KALKAN S., Function and appearance-based emergence of object concepts through affordances, Post Graduate, İ.ATIL(Student), 2010

ŞAHİN E., A developmental framework for learning affordances, Doctorate, E.UĞUR(Student), 2010

ŞAHİN E., Action recognition through action generation, Post Graduate, B.AKGÜN(Student), 2010

ŞAHİN E., Implementation of a closed-loop action generation system on a humanoid robot through learning by demonstration, Post Graduate, D.TUNAOĞLU(Student), 2010

ŞAHİN E., KALKAN S., Emergence of verb and object concepts through learning affordances, Post Graduate, N.DAĞ(Student), 2010

ŞAHİN E., Self-organized flocking with a mobile robot swarm, Doctorate, A.EMRE(Student), 2008

ŞAHİN E., To flock or not to flock: Pros and cons of flocking in long-range "migration" of mobile robot swarms, Post Graduate, F.GÖKÇE(Student), 2008

ŞAHİN E., Control of a mobile robot swarm via informed robots, Post Graduate, H.ÇELİKKANAT(Student), 2008

ŞAHİN E., Using learned affordances for robotic behavior development, Post Graduate, M.REMZİ(Student), 2007

ŞAHİN E., Robot planing based on learned affordances, Post Graduate, M.Çakmak(Student), 2007

ŞAHİN E., Robot planning based on learned affordances, Post Graduate, M.ÇAKMAK(Student), 2007

ŞAHİN E., Direct perception of traversibility affordance on range images through learning on a mobile robot, Post Graduate, E.UĞUR(Student), 2006

ŞAHİN E., Towards learning affordances: Detection of relevant features and characteristics for reachability, Post Graduate, S.EREN(Student), 2006

ŞAHİN E., A systematic study of probabilistic aggregation strategies in swarm robotic systems, Post Graduate, O.SOYSAL(Student), 2005

ŞAHİN E., Evolving aggregation behaviors for swarm robotic systems: A systematic case study, Post Graduate, E.BAHÇECİ(Student), 2005

ŞAHİN E., Evolving aggregation behaviors for swarm robotics systems: a systematic case study, Post Graduate, E.Bahçeci(Student), 2005

Books & Book Chapters

I. Swarm robotics: From sources of inspiration to domains of application

ŞAHİN E.

in: SWARM ROBOTICS, Sahin, E; Spears, WM, Editor, Springer-Verlag , pp.10-20, 2005

Refereed Congress / Symposium Publications in Proceedings

I. Learning affordances for categorizing objects and their properties

Dağ N., Atıl I., KALKAN S., ŞAHİN E.

2010 20th International Conference on Pattern Recognition, ICPR 2010, İstanbul, Turkey, 23 - 26 August 2010, pp.3089-3092

II. Towards linking affordances with mirror/canonical neurons

ŞAHİN E., ERDOĞAN S. T.

24th International Symposium on Computer and Information Sciences, Güzelyurt, Cyprus (Kktc), 14 - 16 September 2009, pp.396-403

III. Predicting future object states using learned affordances

Ugur E., ŞAHİN E., Oztop E.

24th International Symposium on Computer and Information Sciences, Güzelyurt, Cyprus (Kktc), 14 - 16 September 2009, pp.414-416

Supported Projects

ŞAHİN E., TUBITAK Project, CIRAK: Montaj İscileri için Uyumlu Robot Manipulator Destegi, 2017 - Continues

Şahin E., Koku A. B. , Turgut A. E. , Saranlı U., Kalkan S., Keysan O., Cinbiş R. G. , Akbaş E., Ankaralı M. M. , Saranlı A., et al., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, ROBOTİK TEKNOLOJİLERİ ARAŞTIRMA, GELİŞTİRME ve EĞİTİM MERKEZİ (ROMER), 2019 - 2022

Şahin E., Turgut A. E. , Company, Sürü İHA Geliştirme Projesi, 2019 - 2021

Şahin E., Yazıcı A., FP7 Project, IthruI Towards Better Robot Manipulation Improvement through Interaction, 2014 - 2016

Şahin E., TUBITAK Project, İnsansı Robotlarda Sağlıklı Tabanlı Kavram Gelişimi ve Alet Kullanımı, 2009 - 2013

Şahin E., EU Supported Other Project, Emergence of Communication in iCub through Sensorimotor and Social Interaction

http eris liralab it wiki RobotCub Open Call de 31 proje arasında 6 olup 255000 Euroluk bir insansı robot kazandım

Robot ve ilişkili proje Aralık 2009da başladı, 2009 - 2012

Şahin E., Kalkan S., FP7 Project, ROSSI, 2008 - 2011

Şahin E., TUBITAK Project, Kontrol Edilebilir Robot Ogulları, 2005 - 2010

Şahin E., Üçoluk G., FP6 Project, MACS, 2004 - 2007

Contractual Researches

Şahin E., Turgut A. E. , ATILIM Üniversitesi, Sürü İHA TKY Projesi, 2017 - 2019

Activities in Scientific Journals

Swarm Intelligence, Committee Member, 2008 - Continues

Adaptive Behavior, Assistant Editor, 2008 - Continues

Scientific Refereeing

AUTONOMOUS AGENTS AND MULTI-AGENT SYSTEMS, SCI Journal, November 2019

INTERNATIONAL JOURNAL OF ROBOTICS RESEARCH, SCI Journal, November 2019

INTERNATIONAL JOURNAL OF ADVANCED ROBOTIC SYSTEMS, Other Indexed Journal, September 2019

TUBITAK Project, 1003 - Priority Areas R&D Projects Support Program, Middle East Technical University, Turkey, August 2019

Edit Congress and Symposium Activities

21st International Conference on Speech and Computer SPECOM 2019, Invited Speaker, İstanbul, Turkey, 2019

Yapay Öğrenme Yaz Okulu, Invited Speaker, İstanbul, Turkey, 2019

Türkiye Robotbilim Kongresi, Working Group, İstanbul, Turkey, 2019

Citations

Total Citations (WOS):1365

h-index (WOS):16