

## Prof. Dr. ULUÇ SARANLI

### Kişisel Bilgiler

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ScopusID: 6602240964

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### Eğitim Bilgileri

Doktora, The University of Michigan, Electrical Engineering And Computer Science, Amerika Birleşik Devletleri 1998 - 2002

Yüksek Lisans, University of Michigan, Mühendislik Fakültesi, Bilgisayar Bilimleri, Amerika Birleşik Devletleri 1996 - 1998

Lisans, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Türkiye 1992 - 1996

### Yabancı Diller

İngilizce, C1 İleri

### Yaptığı Tezler

Doktora, Dynamic locomotion with a Hexapod Robot, The University Of Michigan, Electrical Engineering And Computer Science, 2002

### Araştırma Alanları

Makina Mühendisliği, Makina Teorisi ve Dinamiği, Robotik , Mühendislik ve Teknoloji

### Akademik Unvanlar / Görevler

Prof. Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2018 - Devam Ediyor

Doç. Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2012 - 2018

Yrd. Doç. Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2012 - 2012

Yrd. Doç. Dr., İhsan Doğramacı Bilkent Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2005 - 2012

Öğretim Görevlisi Dr., Carnegie Mellon University, Faculty Of Engineering, Robotics Institute, 2002 - 2005

Araştırma Görevlisi, The University of Michigan, Faculty Of Engineering, Electrical Engineering And Computer Science, 1996 - 2002

## Yönetilen Tezler

- SARANLI U., Control of quadruped walking behavior through an embedding of spring loaded inverted pendulum template, Yüksek Lisans, M.KAAN(Öğrenci), 2022
- SARANLI U., Foothold selection for quadruped robots based on feasible ground reaction force sets, Yüksek Lisans, F.DAVULCU(Öğrenci), 2022
- SARANLI U., Yay kütleli koşunun sanal bacak sönümlenme katsayısı aracılığı ile kontrolü, Doktora, G.Seçer(Öğrenci), 2020
- SARANLI U., Synchronization of multiple serially actuated robotic legs using virtual damping control, Yüksek Lisans, M.ÖZEN(Öğrenci), 2018
- SARANLI U., Identification of legged locomotion via model-based and data-driven approaches, Doktora, İ.UYANIK(Öğrenci), 2017
- SARANLI U., Stability and control of a compass gait model walking with series-elastic ankle actuation, Doktora, D.KERİMOĞLU(Öğrenci), 2017
- SARANLI U., Estimation of ground reaction forces using forearm crutches instrumented with pressure sensors and accelerometers, Yüksek Lisans, Ç.SEYLAN(Öğrenci), 2016
- SARANLI U., SARANLI A., A novel real-time inertial motion blur metric with applications to motion blur compensation, Yüksek Lisans, M.MUTLU(Öğrenci), 2014
- SARANLI A., SARANLI U., Özgün gerçek zamanlı ataletsel hareket bulanıklığı ölçüğü ve hareket bulanıklığı giderme üzerine uygulamaları, Yüksek Lisans, M.Mutlu(Öğrenci), 2014
- SARANLI U., Identification and stability analysis of periodic motions for a planar legged runner with a rigid body and a compliant leg, Yüksek Lisans, G.BAYIR(Öğrenci), 2013
- SARANLI U., 3D dynamic modeling of a spherical wheeled self-balancing mobile robot, Yüksek Lisans, A.NAİL(Öğrenci), 2012
- SARANLI U., Using shape information from natural tree landmarks for improving slam performance, Yüksek Lisans, B.TURAN(Öğrenci), 2012
- SARANLI U., Modeling of flexible needle insertion in moving tissue, Yüksek Lisans, A.DENİZ(Öğrenci), 2012
- SARANLI U., An actuated flexible spinal mechanism for a bounding quadrupedal robot, Yüksek Lisans, U.ÇULHA(Öğrenci), 2012
- SARANLI U., Adaptive control of a one-legged hopping robot through dynamically embedded spring loaded inverted pendulum template, Yüksek Lisans, İ.UYANIK(Öğrenci), 2011
- SARANLI U., Improving visual SLAM by filtering outliers with the aid of optical flow, Yüksek Lisans, T.ÖZASLAN(Öğrenci), 2011
- SARANLI U., Detection of tree trunks as visual landmarks in outdoor environments, Yüksek Lisans, T.YILDIZ(Öğrenci), 2010
- SARANLI A., SARANLI U., Control of hexapedal pronking through a dynamically embedded spring loaded inverted pendulum template, Yüksek Lisans, M.MERT(Öğrenci), 2010
- SARANLI U., A backwards theorem prover with focusing, resource management and constraints for robotic planning within intuitionistic linear logic, Yüksek Lisans, S.KORTİK(Öğrenci), 2010
- SARANLI U., A USB-based real-time communication infrastructure for robotic platforms, Yüksek Lisans, C.ÖZTÜRK(Öğrenci), 2009
- SARANLI U., Model based methods for the control and planning of running robots, Yüksek Lisans, Ö.ARSLAN(Öğrenci), 2009
- SARANLI U., Experiments in integrating constraints with logical reasoning for robotic planning within the twelf logical framework and the prolog language, Yüksek Lisans, M.DUATEPE(Öğrenci), 2008
- SARANLI U., Line segment based range scan matching without pose information for indoor environments, Yüksek Lisans, İ.YAKIN(Öğrenci), 2008
- SARANLI U., The universal robot bus: A local communication infrastructure for small robots, Yüksek Lisans, A.AVCI(Öğrenci), 2008

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Design and verification of a parallel elastic robotic leg**  
TANFENER E., KARAGÖZ O. K., CANDAN S. Ş., TURGUT A. E., YAZICIOĞLU Y., ANKARALI M. M., SARANLI U.  
Bioinspiration and Biomimetics, cilt.19, sa.2, 2024 (SCI-Expanded)
- II. **Analysis and control of a running spring-mass model with a trunk based on virtual pendulum concept**  
Karagoz O. K., Secer G., Ankarali M. M., Saranli U.  
Bioinspiration and Biomimetics, cilt.17, sa.4, 2022 (SCI-Expanded)
- III. **Efficient bipedal locomotion on rough terrain via compliant ankle actuation with energy regulation**  
Kerimoglu D., Karkoub M., Ismail U., MORGÜL Ö., SARANLI U.  
BIOINSPIRATION & BIOMIMETICS, cilt.16, sa.5, 2021 (SCI-Expanded)
- IV. **The Effects of Clinical and Home-based Physiotherapy Programs in Secondary Head and Neck Lymphedema**  
Ozdemir K., KESER İ., DÜZLÜ M., ERPOLAT Ö. P., SARANLI U., TUTAR H.  
LARYNGOSCOPE, cilt.131, sa.5, 2021 (SCI-Expanded)
- V. **Robotic Task Planning Using a Backchaining Theorem Prover for Multiplicative Exponential First-Order Linear Logic**  
Kortik S., SARANLI U.  
JOURNAL OF INTELLIGENT & ROBOTIC SYSTEMS, cilt.96, sa.2, ss.179-191, 2019 (SCI-Expanded)
- VI. **Frequency-Domain Subspace Identification of Linear Time-Periodic (LTP) Systems**  
Uyanik İ., Saranlı U., Ankaralı M. M., Cowan N., Morgül Ö.  
IEEE TRANSACTIONS ON AUTOMATIC CONTROL, cilt.64, ss.2529-2536, 2019 (SCI-Expanded)
- VII. **Control of Planar Spring-Mass Running Through Virtual Tuning of Radial Leg Damping**  
Secer G., SARANLI U.  
IEEE TRANSACTIONS ON ROBOTICS, cilt.34, sa.5, ss.1370-1383, 2018 (SCI-Expanded)
- VIII. **Estimation of Ground Reaction Forces Using Low-Cost Instrumented Forearm Crutches**  
Seylan C., SARANLI U.  
IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, cilt.67, sa.6, ss.1308-1316, 2018 (SCI-Expanded)
- IX. **LinGraph: a graph-based automated planner for concurrent task planning based on linear logic**  
Kortik S., SARANLI U.  
APPLIED INTELLIGENCE, cilt.47, sa.3, ss.914-934, 2017 (SCI-Expanded)
- X. **Stability and control of planar compass gait walking with series-elastic ankle actuation**  
KERIMOGLU D., MORGUL O., SARANLI U.  
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, cilt.39, sa.3, ss.312-323, 2017 (SCI-Expanded)
- XI. **Approximate analytical solutions to the double-stance dynamics of the lossy spring-loaded inverted pendulum**  
SHAHBAZI M., SARANLI U., BABUSKA R., LOPES G. A. D.  
BIOINSPIRATION & BIOMIMETICS, cilt.12, sa.1, 2017 (SCI-Expanded)
- XII. **Identification of a vertical hopping robot model via harmonic transfer functions**  
Uyanik I., Ankarali M. M., Cowan N. J., SARANLI U., Morgul O.  
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, cilt.38, sa.5, ss.501-511, 2016 (SCI-Expanded)
- XIII. **Experimental Validation of a Feed-Forward Predictor for the Spring-Loaded Inverted Pendulum Template**  
Uyanik I., Morgul O., SARANLI U.  
IEEE TRANSACTIONS ON ROBOTICS, cilt.31, sa.1, ss.208-216, 2015 (SCI-Expanded)
- XIV. **Optimal control of a half-circular compliant legged monopod**  
AYDIN Y. O., SARANLI A., YAZICIOĞLU Y., SARANLI U., LEBLEBICIOGLU K.

- CONTROL ENGINEERING PRACTICE, cilt.33, ss.10-21, 2014 (SCI-Expanded)
- XV. **Reactive Planning and Control of Planar Spring-Mass Running on Rough Terrain**  
Arslan O., Saranlı U.  
IEEE TRANSACTIONS ON ROBOTICS, cilt.28, sa.3, ss.567-579, 2012 (SCI-Expanded)
- XVI. **Model-Based Proprioceptive State Estimation for Spring-Mass Running**  
Gur O., Saranlı U.  
ROBOTICS: SCIENCE AND SYSTEMS VII, ss.105-112, 2012 (SCI-Expanded)
- XVII. **A Modular Real-Time Fieldbus Architecture for Mobile Robotic Platforms**  
Saranlı U., Avci A., Oeztuerk M. C.  
IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, cilt.60, sa.3, ss.916-927, 2011 (SCI-Expanded)
- XVIII. **Control of underactuated planar pronking through an embedded spring-mass Hopper template**  
Ankaralı M. M., Saranlı U.  
AUTONOMOUS ROBOTS, cilt.30, ss.217-231, 2011 (SCI-Expanded)
- XIX. **Analysis and Control of a Dissipative Spring-Mass Hopper with Torque Actuation**  
ANKARALI M. M., Saranlı U.  
ROBOTICS: SCIENCE AND SYSTEMS VI, ss.41-48, 2011 (SCI-Expanded)
- XX. **Approximate analytic solutions to non-symmetric stance trajectories of the passive Spring-Loaded Inverted Pendulum with damping**  
Saranlı U., Arslan O., Ankaralı M. M., Morgul O.  
NONLINEAR DYNAMICS, cilt.62, ss.729-742, 2010 (SCI-Expanded)
- XXI. **Stride-to-stride energy regulation for robust self-stability of a torque-actuated dissipative spring-mass hopper**  
Ankaralı M. M., Saranlı U.  
CHAOS, cilt.20, 2010 (SCI-Expanded)
- XXII. **Solving models of controlled dynamic planar rigid-body systems with frictional contact**  
GREENFIELD A., Saranlı U., RIZZI A.  
INTERNATIONAL JOURNAL OF ROBOTICS RESEARCH, cilt.24, sa.11, ss.911-931, 2005 (SCI-Expanded)
- XXIII. **Multi-point contact models for dynamic self-righting of a Hexapod**  
Saranlı U., Rizzi A. A., Koditschek D. E.  
Springer Tracts in Advanced Robotics, cilt.17, ss.409-424, 2005 (SCI-Expanded)
- XXIV. **Model-based dynamic self-righting maneuvers for a hexapedal robot**  
Saranlı U., RIZZI A., KODITSCHEK D.  
INTERNATIONAL JOURNAL OF ROBOTICS RESEARCH, cilt.23, sa.9, ss.903-918, 2004 (SCI-Expanded)
- XXV. **RHex: A biologically inspired hexapod runner**  
ALTENDORFER R., MOORE N., Komsuolu H., BUEHLER M., BROWN H., MCMORDIE D., Saranlı U., FULL R., KODITSCHEK D.  
AUTONOMOUS ROBOTS, cilt.11, sa.3, ss.207-213, 2001 (SCI-Expanded)
- XXVI. **RHex: A simple and highly mobile hexapod robot**  
Saranlı U., Buehler M., Koditschek D.  
INTERNATIONAL JOURNAL OF ROBOTICS RESEARCH, cilt.20, ss.616-631, 2001 (SCI-Expanded)
- XXVII. **Evidence for spring loaded inverted pendulum running in a hexapod robot**  
ALTENDORFER R., Saranlı U., KOMSUOGLU H., KODITSCHEK D., BROWN H., BUEHLER M., MOORE N., MCMORDIE D., FULL R.  
EXPERIMENTAL ROBOTICS VII, cilt.271, ss.291-302, 2001 (SCI-Expanded)

## **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Design, modeling and preliminary control of a compliant hexapod robot**  
Saranlı U., Buehler M., Koditschek D. E.  
Proceedings-IEEE International Conference on Robotics and Automation, cilt.3, ss.2589-2596, 2000 (Scopus)

## Kitaplar

- I. **Analysis and control of a dissipative spring-mass hopper with torque actuation**  
Ankaralı M. M., Saranlı U.  
Robotics: Science and Systems VI, Yoky Matsuoka, Hugh Durrant-Whyte, José Neira, Editör, The MIT Press, Cambridge (MA), USA, Massachusetts, ss.41-48, 2011

## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Contact Consistent Disturbance Estimation for Quadruped Robots**  
Ozden H. C., Tanfener E., Orhon H. E., Banus O. T., Saranlı U., Ankaralı M. M., Turgut A. E.  
20th IEEE International Conference on Automation Science and Engineering, CASE 2024, Bari, İtalya, 28 Ağustos - 01 Eylül 2024, ss.1081-1087
- II. **Characterization of Fixed Points of Spring-Mass Model with a Body Govde Eklenmiş Yay-Kutle Modelinin Sabit Noktalarının Karakterizasyonu**  
Karagoz O. K., Sever I., Dilsad Er G., SARANLI U., ANKARALI M. M.  
28th Signal Processing and Communications Applications Conference, SIU 2020, Gaziantep, Türkiye, 5 - 07 Ekim 2020
- III. **Modelling, control and design of a clutched parallel elastically actuated articulated robotic leg through virtual tunable damping**  
TANFENER E., CANDAN S. Ş., TURGUT A. E., SARANLI U.  
ASME 2020 International Mechanical Engineering Congress and Exposition, IMECE 2020, Virtual, Online, 16 - 19 Kasım 2020, cilt.7A-2020
- IV. **Analysis and Control of a Body-Attached Spring-Mass Runner Based on Central Pivot Point Approach**  
Karagoz O. K., Sever I., Saranlı U., Ankaralı M. M.  
IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM), ELECTR NETWORK, 6 - 09 Temmuz 2020, ss.495-500
- V. **Characterization of Fixed Points of Spring-Mass Model With a Body**  
Karagoz O. K., Sever I., Er G. D., SARANLI U., ANKARALI M. M.  
28th Signal Processing and Communications Applications Conference (SIU), ELECTR NETWORK, 5 - 07 Ekim 2020
- VI. **Deadbeat Control of Running with the ATRIAS Biped Based on Spring-Mass Model with Trunk and Tunable Leg Damping**  
SEÇER G., SARANLI U.  
Dynamic Walking, Pensacola, Fl, Amerika Birleşik Devletleri, 21 - 24 Mayıs 2018, ss.1-5
- VII. **Energy efficient control of a 1D hopper through tunable damping**  
SEÇER G., SARANLI U.  
Dynamic Walking, Michigan, Amerika Birleşik Devletleri, 1 - 05 Haziran 2017, ss.1-5
- VIII. **Energy efficient control of planar monopodal running through tunable damping**  
Seçer G., SARANLI U.  
Dynamic Walking Conference, 4 - 07 Temmuz 2016
- IX. **Parametric Identification of Hybrid Linear-Time-Periodic Systems**  
Uyanık I., SARANLI U., Morgul O., Aukarah M. M.  
6th IFAC Symposium on System Structure and Control (SSSC), İstanbul, Türkiye, 22 - 24 Haziran 2016, cilt.49, ss.7-12
- X. **Koltuk Değneklerinden Basınç ve İvme Ölçümleri ile Yeryüzü Tepki Kuvveti Tahmini**  
SEYLAN Ç., SARANLI U.  
Türkiye Robotbilim Konferansı, Türkiye, 26 - 27 Ekim 2015
- XI. **Path Following with An Underactuated Self-Balancing Spherical-Wheel Mobile Robot**  
Inal A. N., Morgul O., SARANLI U.  
International Conference on Advanced Robotics (ICAR), İstanbul, Türkiye, 27 - 31 Temmuz 2015, ss.194-199

- XII. **Toward Data-Driven Models of Legged Locomotion using Harmonic Transfer Functions**  
Uyanik I., Ankaralı M. M., Cowan N. J., Morgul O., SARANLI U.  
International Conference on Advanced Robotics (ICAR), İstanbul, Türkiye, 27 - 31 Temmuz 2015, ss.357-362
- XIII. **Stability of a Compass Gait Walking Model with Series Elastic Ankle Actuation**  
Kerimoglu D., Morgul O., SARANLI U.  
International Conference on Advanced Robotics (ICAR), İstanbul, Türkiye, 27 - 31 Temmuz 2015, ss.351-356
- XIV. **Extending The Lossy Spring-Loaded Inverted Pendulum Model with a Slider-Crank Mechanism**  
Orhon H. E., Odabas C., Uyanik I., Morgul O., SARANLI U.  
International Conference on Advanced Robotics (ICAR), İstanbul, Türkiye, 27 - 31 Temmuz 2015, ss.99-104
- XV. **Identifying Stability Properties of a Hybrid Spring–Mass–Damper via Piecewise LTI Approximation and Harmonic Transfer Functions**  
Uyanik İ., Ankaralı M. M., Cowan N., Morgül Ö., Saranlı U.  
Dynamic Walking 2015, Zürich, İsviçre, 21 - 24 Temmuz 2015
- XVI. **Stability of Planar Compass Gait Walking with Series Elastic Ankle Actuation**  
Kerimoğlu D., MORGÜL Ö., SARANLI U.  
Dynamic Walking Conference, 20 - 24 Temmuz 2015
- XVII. **Independent estimation of input and measurement delays for a hybrid vertical spring-mass-damper via harmonic transfer functions**  
Uyamk I., Ankaralı M. M., Cowan N. J., Saranlı U., Morgül Ö., Özbay H.  
12th IFAC Workshop on Time Delay Systems, TDS 2015, Michigan, Amerika Birleşik Devletleri, 28 - 30 Haziran 2015, cilt.28, ss.298-303
- XVIII. **System Identification of Legged Locomotion via Harmonic Transfer Functions and Piecewise LTI Approximation**  
Uyanik İ., Ankaralı M. M., Cowan N., Morgül Ö., Saranlı U.  
Dynamic Walking 2014, Zürich, İsviçre, 10 - 13 Haziran 2014
- XIX. **Linear Planning Logic: An Efficient Language and Theorem Prover for Robotic Task Planning**  
Kortik S., SARANLI U.  
IEEE International Conference on Robotics and Automation (ICRA), Hong Kong, PEOPLES R CHINA, 31 Mayıs - 07 Haziran 2014, ss.3764-3770
- XX. **Control of Hopping Through Active Virtual Tuning of Leg Damping for Serially Actuated Legged Robots**  
SEÇER G., SARANLI U.  
IEEE International Conference on Robotics and Automation (ICRA), Hong Kong, PEOPLES R CHINA, 31 Mayıs - 07 Haziran 2014, ss.4556-4561
- XXI. **A Real-Time Inertial Motion Blur Metric: Application to Frame Triggering Based Motion Blur Minimization**  
Mutlu M., SARANLI A., SARANLI U.  
IEEE International Conference on Robotics and Automation (ICRA), Hong Kong, PEOPLES R CHINA, 31 Mayıs - 07 Haziran 2014, ss.671-676
- XXII. **A Real-Time Inertial Motion Blur Metric**  
Mutlu M., SARANLI A., SARANLI U.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Türkiye, 23 - 25 Nisan 2014, ss.2225-2228
- XXIII. **Control of Monopedal Running Through Tunable Damping**  
SEÇER G., SARANLI U.  
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 Nisan 2013
- XXIV. **A 3D Dynamic Model of a Spherical Wheeled Self-Balancing Robot**  
Inal A. N., Morgul O., SARANLI U.  
25th IEEE\RSJ International Conference on Intelligent Robots and Systems (IROS), Algarve, Portekiz, 7 - 12 Ekim 2012, ss.5381-5386
- XXV. **A DYNAMIC MODEL OF RUNNING WITH A HALF-CIRCULAR COMPLIANT LEG**

Ankaralı M. M., SAYGINER E., YAZICIOĞLU Y., SARANLI A., SARANLI U.  
15th International Conference on Climbing and Walking Robots and the Support Technologies for Mobile  
Machines, Maryland, Amerika Birleşik Devletleri, 23 - 26 Temmuz 2012, ss.425-432

- XXVI. **TD-SLIP: A better predictive model for human running**  
Ankaralı M. M., Cowan N., Saranlı U.  
Dynamic Walking 2012, Florida, Amerika Birleşik Devletleri, 21 - 24 Mayıs 2012
- XXVII. **Model-based proprioceptive state estimation for spring-mass running**  
Gür Ö., Saranlı U.  
International Conference on Robotics Science and Systems, RSS 2011, California, Amerika Birleşik Devletleri, 27  
Haziran - 01 Temmuz 2011, cilt.7, ss.105-112
- XXVIII. **Quadrupedal Bounding with an Actuated Spinal Joint**  
Culha U., Saranlı U.  
IEEE International Conference on Robotics and Automation (ICRA), Shanghai, Çin, 9 - 13 Mayıs 2011, ss.1392-1397
- XXIX. **Adaptive Control of a Spring-Mass Hopper**  
Uyanık I., Saranlı U., Morgul O.  
IEEE International Conference on Robotics and Automation (ICRA), Shanghai, Çin, 9 - 13 Mayıs 2011, ss.2138-2143
- XXX. **Analysis And Control Of A Dissipative Spring-mass Hopper With Torque Actuation**  
ANKARALI M. M., SARANLI U.  
Robotics: Science And Systems, Zaragoza, İspanya, 27 - 30 Haziran 2010, ss.41-48
- XXXI. **Control of Underactuated Planar Hexapedal Pronking Through a Dynamically Embedded SLIP  
Monopod**  
Ankaralı M. M., Saranlı U., SARANLI A.  
IEEE International Conference on Robotics and Automation (ICRA), Alaska, Amerika Birleşik Devletleri, 3 - 08  
Mayıs 2010, ss.4721-4727
- XXXII. **Reactive Footstep Planning for a Planar Spring Mass Hopper**  
Arslan O., Saranlı U., Morgul O.  
IEEE RSJ International Conference on Intelligent Robots and Systems, Missouri, Amerika Birleşik Devletleri, 10 - 15  
Ekim 2009, ss.160-166
- XXXIII. **An Analytical Solution to the Stance Dynamics of Passive Spring-Loaded Inverted Pendulum with  
Damping**  
ANKARALI M. M., Arslan O., Saranlı U.  
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(CLAWAR), İstanbul, Türkiye, 9 - 11 Eylül 2009, ss.693-700
- XXXIV. **An Approximate Stance Map of The Spring Mass Hopper with Gravity Correction For Nonsymmetric  
Locomotions**  
Arslan O., Saranlı U., Morgul O.  
IEEE International Conference on Robotics and Automation, Kobe, Japonya, 12 - 17 Mayıs 2009, ss.1829-1830
- XXXV. **Using constrained intuitionistic linear logic for hybrid robotic planning problems**  
Saranlı U., Pfenning F.  
IEEE International Conference on Robotics and Automation, Rome, İtalya, 10 - 14 Nisan 2007, ss.3705-3706
- XXXVI. **Robotics in scansorial environments**  
AUTUMN K., BUEHLER M., CUTKOSKY M., FEARING R., FULL R., GOLDMAN D., GROFF R., PROVANCHER W., RIZZI A.,  
Saranlı U., et al.  
Conference on Unmanned Ground Vehicle Technology VII, Florida, Amerika Birleşik Devletleri, 29 - 31 Mart 2005,  
cilt.5804, ss.291-302
- XXXVII. **Multi-point contact models for dynamic self-righting of a hexapod**  
Saranlı U., RIZZI A., KODITSCHKEK D.  
6th International Workshop on Algorithmic-Foundations-of-Robotics, Zeist, Hollanda, 11 - 13 Temmuz 2004,  
cilt.17, ss.409-424
- XXXVIII. **Template based control of hexapedal running**  
Saranlı U., KODITSCHKEK D.

20th IEEE International Conference on Robotics and Automation (ICRA), Taipei, Tayvan, 14 - 19 Eylül 2003, ss.1374-1379

**XXXIX. Back flips with a hexapedal robot**

Saranli U., KODITSCHEK D.

19th IEEE International Conference on Robotics and Automation (ICRA), Washington, Kiribati, 11 - 15 Mayıs 2002, ss.2209-2215

**XL. Evidence for Spring Loaded Inverted Pendulum Running in a Hexapod Robot**

Altendorfer R., SARANLI U., Komsuoğlu H., Koditschek D. E., Brown H. B., Buehler M., Moore N., McMordie D., Full R. International Symposium on Experimental Robotics, 11 - 13 Aralık 2000

**XLI. Proprioception based behavioral advances in a hexapod robot**

Komsuoglu H., McMordie D., Saranli S., Moore N., Buehler M., Koditschek D.

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**XLII. Toward the control of a multi-jointed, monoped runner**

Saranli U., SCHWIND W., KODITSCHEK D.

IEEE International Conference on Robotics and Automation, Leuven, Belçika, 16 - 20 Mayıs 1998, ss.2676-2682

## **Desteklenen Projeler**

SARANLI U., Yükseköğretim Kurumları Destekli Proje, Küresel tekerlekli mobil robotlarda denge, yörünge kontrolü ve yol planlaması, 2013 - 2019

## **Patent**

SARANLI U., Single actuator per leg robotic hexapod, Patent, BÖLÜM F Makine Mühendisliği; Aydınlatma; Isıtma; Silahlar; Tahrip Malzemeleri, Standart Tescil, 2002

## **Bilimsel Hakemlikler**

International Journal on Robotics Research, Hakemli Bilimsel Dergi, Nisan 2018

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