Prof. VEYSEL GAZİ

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Biography

Prof. Dr. Veysel Gazi Kırcaali Bulgaristan'da doğmuş ve çocukluğunu küçük bir köyde geçirmiştir. 1989 yılında zorunlu göç nedeni ile ailesi ile birlikte Türkiye'ye etmiş ve İstanbul'a yerleşmiştir.

Eğitim Durumu

I. Doktora: Ohio Eyalet Üniversitesi, Elektrik Mühendisliği Bölümü, Columbus, Ohio, ABD, Ağustos 2002. Ana alan: Kontrol ve kumada sistemleri, Yan alanlar: Sinyal işleme ve Matematik. Tez konusu: Sürülerde Kararlılık Analizi
II. Yüksek Lisans: Ohio Eyalet Üniversitesi, Elektrik Mühendisliği Bölümü, Columbus, Ohio, ABD, Ağustos 1998. Tez konusu: Kesik Olay Sistemlerde Sınırlı İleri-Bakış Yöntemi Kullanarak Kontrol ve Kararlılaştırma
III. Lisans: Orta Doğu Teknik Üniversitesi, Elektrik-Elektronik Mühendisliği Bölümü, Ankara, Türkiye, Haziran 1996. Bilgisayar ve Kontrol/Kumanda Sistemleri opsiyonunda uzmanlaşma
IV. Lise: Zeytinburnu İhsan Mermerci Lisesi, Zeytinburnu, İstanbul, Türkiye, Haziran 1991. Okul birincisi.
V. Lise: Otets Paisiy Lisesi (Kırcaali Matematik Lisesi), Eylül 1987-Haziran 1989, Kırcaali, Bulgaristan
VI. İlkokul: Vasil Levski Temel İlköğretim Okulu, Zvinitsa Köyü, Bulgaristan.

Education Information

Doctorate, Ohio State University, Electrical Engineering, United States Of America 1998 - 2002
Postgraduate, Ohio State University, Electrical Engineering, United States Of America 1996 - 1998
Undergraduate, Middle East Technical University, Faculty Of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1991 - 1996

Foreign Languages

Bulgarian, C2 Mastery
English, C2 Mastery

Dissertations

Dissertations

Doctorate, Stability analysis of swarms, Ohio State University, Electrical Engineering, 2002
Postgraduate, Control and stabilization of discrete event systems with limited look-ahead policies, Ohio State University, Electrical Engineering, 1998

Research Areas

Information Systems, Communication and Control Engineering, Control and System Engineering, Robotics and Mechatronics Systems, Electrical and Electronics Engineering, Engineering and Technology

Academic Titles / Tasks

Professor, Marmara University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 2017 - Continues
Professor, Altinbas University, Faculty Of Engıneerıng And Natural Scıences, Department Of Electrıcal And Electronıc Engıneerıng, 2011 - 2017
Associate Professor, İstanbul Kemerburgaz Üniversitesi, Mühendislik-Mimarlık Fakültesi, Elektrik Ve Elektronik Mühendisliği Bölümü, 2011 - 2011
Associate Professor, Tobb University Of Economics And Technology, Faculty Of Engıneerıng, Department Of Electrıcal And Electronıcs Engıneerıng, 2006 - 2010
Assistant Professor, Tobb University Of Economics And Technology, Faculty Of Engıneerıng, Department Of Electrıcal And Electronıcs Engıneerıng, 2004 - 2006
Assistant Professor, Atilim University, Faculty Of Engıneerıng, Department Of Electrıcal And Electronıcs Engıneerıng, 2002 - 2004

Academic and Administrative Experience

Altınbaş Üniversitesi, Mühendislik Ve Doğa Bilimleri Fakültesi, 2016 - 2016
İstanbul Kemerburgaz Üniversitesi, Mühendislik-Mimarlık Fakültesi, Elektrik Ve Elektronik Mühendisliği Bölümü, 2011 - 2016
İstanbul Kemerburgaz Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik Ve Bilgisayar Mühendisliği (Yl) (Tezli), 2011 - 2015

Advising Theses

GAZİ V., CHEMICAL GAS CONCENTRATION MAP BUILDING AND SOURCE LOCALIZATION BY A MULTI-ROBOT SYSTEM THROUGH WHALE OPTIMIZATION ALGORITHM, Postgraduate, M.ALP(Student), 2017
GAZİ V., Tek bakış açısı derinlik kestirimi yöntemi ile robot denetimi, Postgraduate, E.KARATAŞ(Student), 2010
GAZİ V., Gezgin robot sistemlerinde konumlandırma ve haritalama, Postgraduate, Y.ATAŞ(Student), 2010
GAZİ V., Yapay potansiyel fonksiyonlar ve panel metodu kullanarak robot dizilim kontrolü ve seyrüseferi, Postgraduate, A.RAZZAK(Student), 2010
GAZİ V., Biyolojik tabanlı eniyileme yöntemleri kullanılarak çoklu robotlar ile bilinmeyen bir ortamın gerçek zamanlı kimyasal gaz yoğunluğu haritalanması, Postgraduate, M.TURDUEV(Student), 2010
GAZİ V., Çok erkinli bir sistem sınıfında uyarlanır iç model tabanlı çıktı denetimi yöntemi ile hareket ve dizilim denetimi, Postgraduate, E.GÜL(Student), 2010
GAZİ V., Dinamik komşuluklu eşzamansız dağınık parçacık sürü eniyileme yöntemi ve çok robotlu arama görevinde uygulanması, Postgraduate, S.BURAK(Student), 2009
GAZİ V., Çoklu robot sistemlerinde robotlar arası haberleşme ve işbirliği kullanılarak arama verimliliğinin artırılması, Postgraduate, Ö.ÇAYIRPUNAR(Student), 2009
GAZİ V., Kayan kip tekniği ve yapay potansiyel fonksiyonlar ile sürü robot hareket denetimi, Postgraduate, M.İLTER(Student), 2008

Published journal articles indexed by SCI, SSCI, and AHCI

I. **A Generalized Gazi-Passino Model With Coordinate-Coupling Matrices for Swarm Formation With Rotation Behavior**
Fedele G., D'Alfonso L., GAZİ V.
IEEE TRANSACTIONS ON CONTROL OF NETWORK SYSTEMS, vol.9, no.3, pp.1227-1237, 2022 (SCI-Expanded)

II. **Target Capturing in an Ellipsoidal Region for a Swarm of Double Integrator Agents**
Bono A., D'Alfonso L., Fedele G., GAZİ V.
IEEE-CAA JOURNAL OF AUTOMATICA SINICA, vol.9, no.5, pp.801-811, 2022 (SCI-Expanded)

III. **Distributed sensor deployment using potential fields**
Hanay Y. S., GAZİ V.
AD HOC NETWORKS, vol.67, pp.77-86, 2017 (SCI-Expanded)

IV. **Implementation Studies of Robot Swarm Navigation Using Potential Functions and Panel Methods**
Merheb A., GAZİ V., Sezer-Uzol N.
IEEE-ASME TRANSACTIONS ON MECHATRONICS, vol.21, no.5, pp.2556-2567, 2016 (SCI-Expanded)

V. **Experimental studies on chemical concentration map building by a multi-robot system using bio-inspired algorithms**
Turduev M., Cabrita G., Kırtay M., GAZİ V., Marques L.
AUTONOMOUS AGENTS AND MULTI-AGENT SYSTEMS, vol.28, no.1, pp.72-100, 2014 (SCI-Expanded)

VI. **Single-View Distance-Estimation-Based Formation Control of Robotic Swarms**
Fidan B., GAZİ V., Zhai S., Cen N., Karatas E.
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, vol.60, no.12, pp.5781-5791, 2013 (SCI-Expanded)

VII. **On Lagrangian dynamics based modeling of swarm behavior**
GAZİ V.
PHYSICA D-NONLINEAR PHENOMENA, vol.260, pp.159-175, 2013 (SCI-Expanded)

VIII. **A Target Tracking Approach for Nonholonomic Agents Based on Artificial Potentials and Sliding Mode Control**
GAZİ V., Fidan B., Ordonez R., Koksal M. I.
JOURNAL OF DYNAMIC SYSTEMS MEASUREMENT AND CONTROL-TRANSACTIONS OF THE ASME, vol.134, no.6, 2012 (SCI-Expanded)

IX. **Asynchronous particle swarm optimization-based search with a multi-robot system: simulation and implementation on a real robotic system**
Akat S. B., GAZİ V., Marques L.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.18, no.5, pp.749-764, 2010 (SCI-Expanded)

X. **Comparison of three orientation agreement strategies in self-propelled particle systems with turn angle restrictions in synchronous and asynchronous settings**
Samiloglu A. T., GAZİ V., Koku A. B.
ASIAN JOURNAL OF CONTROL, vol.10, no.2, pp.212-232, 2008 (SCI-Expanded)

XI. **Stability of an asynchronous swarm with time-dependent communication links**
GAZİ V.
IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART B-CYBERNETICS, vol.38, no.1, pp.267-274, 2008 (SCI-Expanded)

XII. **Swarm tracking using artificial potentials and sliding mode control**
Yao J., Ordonez R., GAZİ V.
JOURNAL OF DYNAMIC SYSTEMS MEASUREMENT AND CONTROL-TRANSACTIONS OF THE ASME, vol.129, no.5, pp.749-754, 2007 (SCI-Expanded)

XIII. **Target tracking using artificial potentials and sliding mode control**
GAZİ V., Ordonez R.
INTERNATIONAL JOURNAL OF CONTROL, vol.80, no.10, pp.1626-1635, 2007 (SCI-Expanded)

XIV. **Output regulation of a class of linear systems with switched exosystems**

GAZİ V.
INTERNATIONAL JOURNAL OF CONTROL, vol.80, no.10, pp.1665-1675, 2007 (SCI-Expanded)

XV. **Decentralized output regulation of a class of nonlinear systems**
GAZİ V., Passino K. M.
INTERNATIONAL JOURNAL OF CONTROL, vol.79, no.12, pp.1512-1522, 2006 (SCI-Expanded)

XVI. **Swarm aggregations using artificial potentials and sliding-mode control**
GAZİ V.
IEEE TRANSACTIONS ON ROBOTICS, vol.21, no.6, pp.1208-1214, 2005 (SCI-Expanded)

XVII. **Stability of a one-dimensional discrete-time asynchronous swarm**
GAZİ V., Passino K. M.
IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART B-CYBERNETICS, vol.35, no.4, pp.834-841, 2005 (SCI-Expanded)

XVIII. **Formation control of a multi-agent system using non-linear servomechanism**
GAZİ V.
INTERNATIONAL JOURNAL OF CONTROL, vol.78, no.8, pp.554-565, 2005 (SCI-Expanded)

XIX. **A class of attractions/repulsion functions for stable swarm aggregations**
GAZİ V., Passino K. M.
INTERNATIONAL JOURNAL OF CONTROL, vol.77, no.18, pp.1567-1579, 2004 (SCI-Expanded)

XX. **Stability analysis of social foraging swarms**
GAZİ V., Passino K. M.
IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART B-CYBERNETICS, vol.34, no.1, pp.539-557, 2004 (SCI-Expanded)

XXI. **Stability analysis of swarms**
GAZİ V., Passino K. M.
IEEE TRANSACTIONS ON AUTOMATIC CONTROL, vol.48, no.4, pp.692-697, 2003 (SCI-Expanded)

XXII. **Complex control system design and implementation - Using the NIST-RCS software library**
Moore M. L., GAZİ V., Passino K. M., Shackleford W. P., Proctor F. M.
IEEE CONTROL SYSTEMS MAGAZINE, vol.19, no.6, pp.12-28, 1999 (SCI-Expanded)

Articles Published in Other Journals

I. **Coordination and control of multi-agent dynamic systems: Models and approaches**
GAZİ V., Fidan B.
Lecture Notes In Computer Science, vol.4433, pp.71, 2007 (Scopus)

II. **Aggregation, foraging, and formation control of swarms with non-holonomic agents using potential functions and sliding mode techniques**
GAZİ V., Fidan B., Hanay Y. S., Koksal M. I.
Turkish Journal of Electrical Engineering and Computer Sciences, vol.15, pp.149-168, 2007 (Scopus)

III. **Asynchronous cyclic pursuit**
Samiloglu A. T., GAZİ V., Koku A. B.
Lecture Notes In Computer Science, vol.4095, pp.667-678, 2006 (Scopus)

Books & Book Chapters

I. **Swarm Stability and Optimization**
GAZİ V., Passino K. M.
Springer, 2011

II. **The RCS Handbook Tools for Real Time Control Systems Software Development**
GAZİ V., Moore M. L., Passino K. M., Shackleford W. P., Proctor F. M., Albus J. S.

John Wiley and Sons, 2001

Refereed Congress / Symposium Publications in Proceedings

I. **Modelling and Coordination of a Swarm of Quadrotors Using Lagrange Dynamics and Potential Functions**
HALCI B., GAZİ V., CİHAN O.
24th IEEE International Conference on Emerging Technologies and Factory Automation ETFA 2019, Zaragoza, Spain, Spain, 10 - 13 September 2019

II. **Chemical Concentration Map Building Using Whale Optimization Algorithm**
Merzi A., GAZİ V.
IEEE Symposium Series on Computational Intelligence (IEEE SSCI), Hawaii, United States Of America, 27 November - 01 December 2017, pp.1096-1103

III. **Balina eniyileme Yöntemi ile Kimyasal Gaz Sızıntı Kaynağının Tespit Edilmesi**
MERZİ M. A., GAZİ V.
OTOMATİK KONTROL TÜRK MİLLÎ KOMİTESİ ULUSAL TOPLANTISI (TOK 2017), İstanbul, Turkey, 21 - 23 September 2017, pp.218-223

IV. **Particle Swarm Optimization based Distributed Agreement in Multi-Agent Dynamic Systems**
GAZİ V., Ordonez R.
2014 IEEE SYMPOSIUM ON SWARM INTELLIGENCE (SIS), Orlando, 9 - 12 December 2014, pp.174-180

V. **Distributed Output Agreement in a Class of Uncertain Linear Heterogeneous Multi-Agent Dynamic Systems**
GAZİ V.
2014 EUROPEAN CONTROL CONFERENCE (ECC), Strasbourg, France, 24 - 27 June 2014, pp.177-183

VI. **Satellite formation flying: Robust algorithms for propulsion, path planning and control**
Saaj C., Lappas V., Richie D., Gazi V., Schaub H.
2009 10th European Control Conference, ECC 2009, Budapest, Hungary, 23 - 26 August 2009, pp.2456-2463

VII. **Sensor coverage maximization with potential fields**
Hanay Y. S., Gazi V.
19th IEEE Symposium on Computers and Communications, ISCC 2014, Funchal, Portugal, 23 - 26 June 2014

VIII. **Virtual Cancelation Plume for Multiple Odor Source Localization**
Cabrita G., Marques L., GAZİ V.
2013 IEEE/RSJ INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS (IROS), Tokyo, Japan, 3 - 08 November 2013, pp.5552-5558

IX. **Adaptive Formation Control and Target Tracking in a Class of Multi-Agent Systems: Formation Maneuvers**
GAZİ V., Fidan B.
2013 13TH INTERNATIONAL CONFERENCE ON CONTROL, AUTOMATION AND SYSTEMS (ICCAS 2013), Gwangju, South Korea, 20 - 23 October 2013, pp.78-85

X. **Stable Adaptive Particle Swarm Optimization**
Djaneye Boundjou O., Ordonez R., GAZİ V.
2013 13TH INTERNATIONAL CONFERENCE ON CONTROL, AUTOMATION AND SYSTEMS (ICCAS 2013), Gwangju, South Korea, 20 - 23 October 2013, pp.440-445

XI. **Distributed Adaptive Output Agreement in a Class of Multi-Agent Systems**
GAZİ V.
2013 9TH ASIAN CONTROL CONFERENCE (ASCC), İstanbul, Turkey, 23 - 26 June 2013

XII. **Indirect Adaptive Formation Control with Nonlinear Dynamics and Parametric Uncertainty**
Güler S., Köksal N., Fidan B., GAZİ V.
2013 9TH ASIAN CONTROL CONFERENCE (ASCC), İstanbul, Turkey, 23 - 26 June 2013

XIII. **Stochastic Stability Analysis of the Particle Dynamics in the PSO Algorithm**

GAZİ V.
2012 IEEE MULTI-CONFERENCE ON SYSTEMS AND CONTROL (2012 IEEE MSC), Dubrovnik, Croatia, 3 - 05 October 2012, pp.708-713

XIV. **Adaptive Internal Model Based Formation Control of a Class of Multi-Agent Systems with Switched Exosystems**
Gül E., GAZİ V.
PROCEEDINGS OF THE 2012 24TH CHINESE CONTROL AND DECISION CONFERENCE (CCDC), Taiyuan, China, 23 - 25 May 2012, pp.6-13

XV. **Experimental study of robot formation control and navigation using potential functions and panel method**
Merheb A., Gazi V., Sezer-Uzol N.
Joint 41st International Symposium on Robotics, ISR 2010 and 6th German Conference on Robotics 2010, ROBOTIK 2010, Munich, Germany, 7 - 09 June 2010, vol.1, pp.586-593

XVI. **Implementation of Robot Formation Control and Navigation Using Real-Time Panel Method**
Merheb A., Ataş Y., GAZİ V., Sezer-Uzol N.
IEEE/RSJ 2010 INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS (IROS 2010), Taipei, Taiwan, 18 - 22 October 2010

XVII. **Cooperative Chemical Concentration Map Building Using Decentralized Asynchronous Particle Swarm Optimization Based Search by Mobile Robots**
Turduev M., Ataş Y., Sousa P., GAZİ V., Marques L.
IEEE/RSJ 2010 INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS (IROS 2010), Taipei, Taiwan, 18 - 22 October 2010

XVIII. **Chemical Concentration Map Building Through Bacterial Foraging Optimization Based Search Algorithm by Mobile Robots**
Turduev M., Kırtay M., Sousa P., GAZİ V., Marques L.
IEEE INTERNATIONAL CONFERENCE ON SYSTEMS, MAN AND CYBERNETICS (SMC 2010), İstanbul, Turkey, 10 - 13 October 2010, pp.3242-3249

XIX. **Adaptive Formation Control and Target Tracking in a Class of Multi-Agent Systems**
Duran S., GAZİ V.
2010 AMERICAN CONTROL CONFERENCE, Baltimore, 30 June - 02 July 2010, pp.75-80

XX. **Adaptive Internal Model Based Formation Control of a Class of Multi-Agent Systems**
Gül E., GAZİ V.
2010 AMERICAN CONTROL CONFERENCE, Baltimore, 30 June - 02 July 2010, pp.4800-4805

XXI. **Design of circling around a target controllers for mobile robots by feedback linearization**
Samiloglu A. T., Gazi V., Bugra Koku A.
IFAC International Workshop on Periodic Control Systems, PSYCO 2010, Antalya, Turkey, 26 - 28 August 2010, vol.4, pp.138-143

XXII. **Target tracking using adaptive gain backstepping control**
Fidan B., Gazi V.
10th IFAC International Workshop on Adaptation and Learning in Control and Signal Processing, ALCOSP 2010, Antalya, Turkey, 26 - 28 August 2010, vol.1, pp.83-88

XXIII. **Experimental study on the effects of communication range on cooperative robotic search in complex environments**
Çaylrpunar Ö., Gazi V., Tavli B., Cervera E., Witkowski U., Penders J.
2009 2nd International Conference on Robot Communication and Coordination, RoboComm 2009, Odense, Denmark, 31 March - 02 April 2009

XXIV. **An Experiment on Squad Navigation of Human and Robots**
Nomdedeo L., Cervera E., GAZİ V.
2008 10TH INTERNATIONAL CONFERENCE ON CONTROL AUTOMATION ROBOTICS VISION: ICARV 2008, VOLS 1-4, Ha-Noi, Vietnam, 17 - 20 December 2008, pp.1212

XXV. **A synergetic approach for developing practical multi-robot applications**

Cervera E., Gazi V.
39th International Symposium on Robotics, ISR 2008, Seoul, South Korea, 15 - 17 October 2008, pp.495-498

XXVI. **Single view depth estimation based formation control of robotic swarms: Implementation using realistic robot simulator**
Gazi V., Fidan B., Zhai S.
11th International Conference on Climbing and Walking Robots and the Support Technologies for Mobile Machines, CLAWAR 2008, Coimbra, Portugal, 8 - 10 September 2008, pp.1079-1089

XXVII. **Agents at Play: Off-the-shelf Software for Practical Multi-robot Applications**
Cervera E., Sales J., Nomdedeo L., Marin R., GAZİ V.
2008 IEEE/RSJ INTERNATIONAL CONFERENCE ON ROBOTS AND INTELLIGENT SYSTEMS, VOLS 1-3, CONFERENCE PROCEEDINGS, Nice, France, 22 - 26 September 2008, pp.2719

XXVIII. **Decentralized Asynchronous Particle Swarm Optimization**
Akat S. B., GAZİ V.
2008 IEEE SWARM INTELLIGENCE SYMPOSIUM, St Louis, 21 - 23 September 2008, pp.194-201

XXIX. **Particle Swarm Optimization with Dynamic Neighborhood Topology: Three Neighborhood Strategies and Preliminary Results**
Akat S. B., GAZİ V.
2008 IEEE SWARM INTELLIGENCE SYMPOSIUM, St Louis, 21 - 23 September 2008, pp.152-159

XXX. **Agent Standard Protocols for Building Multi-Robot Applications**
Cervera E., GAZİ V.
IAS-10: INTELLIGENT AUTONOMOUS SYSTEMS 10, Baden Baden, 24 July 2008, pp.1-5

XXXI. **Single View Depth Estimation Based Formation Control of Robotic Swarms: Obstacle Avoidance, Simulation, and Practical Issues**
Zhai S., Fidan B., Öztürk Ş. Ç., GAZİ V.
2008 MEDITERRANEAN CONFERENCE ON CONTROL AUTOMATION, VOLS 1-4, Ajaccio, France, 25 - 27 June 2008, pp.1807

XXXII. **Tracking a Maneuvering Target with a Non-holonomic Agent Using Artificial Potentials and Sliding Mode Control**
Koksal M. I., GAZİ V., Fidan B., Ordonez R.
2008 MEDITERRANEAN CONFERENCE ON CONTROL AUTOMATION, VOLS 1-4, Ajaccio, France, 25 - 27 June 2008, pp.1324

XXXIII. **Coordination and control of multi-agent dynamic systems: Models and approaches**
Gazi V., Fidan B.
2nd International Workshop on Swarm Robotics, SAB 2006, Rome, Italy, 30 September - 01 October 2006, pp.71-102

XXXIV. **Asynchronous particle swarm optimization**
GAZİ V.
2007 IEEE 15TH SIGNAL PROCESSING AND COMMUNICATIONS APPLICATIONS, VOLS 1-3, Eskişehir, Turkey, 11 - 13 June 2007, pp.41-44

XXXV. **Particle swarm optimization with dynamic neighborhood**
GAZİ V.
2007 IEEE 15TH SIGNAL PROCESSING AND COMMUNICATIONS APPLICATIONS, VOLS 1-3, Eskişehir, Turkey, 11 - 13 June 2007, pp.37-40

XXXVI. **Formation control with potential functions and Newton's iteration**
Hanay Y. S., Hunerli H. V., Koksal M. I., Samiloglu A. T., Gazi V.
2007 9th European Control Conference, ECC 2007, Kos, Greece, 2 - 05 July 2007, pp.4584-4590

XXXVII. **Aggregation in a swarm of non-holonomic agents using artificial potentials and sliding mode control**
Gazi V., Koksal M. I., Fidan B.
2007 9th European Control Conference, ECC 2007, Kos, Greece, 2 - 05 July 2007, pp.1485-1491

XXXVIII. **Spacecraft swarm navigation and control using artificial potential field and sliding mode control**
Saaj C. M., Lappas V., GAZİ V.

2006 IEEE INTERNATIONAL CONFERENCE ON INDUSTRIAL TECHNOLOGY, VOLS 1-6, Bombay, 15 - 17 December 2006, pp.2809

XXXIX. **Swarm tracking using artificial potentials and sliding mode control**
Yao J., Ordonez R., GAZİ V.
PROCEEDINGS OF THE 45TH IEEE CONFERENCE ON DECISION AND CONTROL, VOLS 1-14, San Diego, 13 - 15 December 2006, pp.4670

XL. **Effects of asynchronism and neighborhood size on clustering in self-propelled particle systems**
Samiloglu A. T., GAZİ V., Koku A. B.
COMPUTER AND INFORMATION SCIENCES - ISCIS 2006, PROCEEDINGS, İstanbul, Turkey, 1 - 03 November 2006, vol.4263, pp.665-676

XLI. **Asynchronous cyclic pursuit**
Şamiloğlu A. T., Gazi V., Koku B.
9th International Conference on Simulation of Adaptive Behavior, SAB 2006, Rome, Italy, 25 - 29 September 2006, pp.667-678

XLII. **Target tracking using artificial potentials and sliding mode control**
GAZİ V., Ordonez R.
PROCEEDINGS OF THE 2004 AMERICAN CONTROL CONFERENCE, VOLS 1-6, Boston, 30 June - 02 July 2004

XLIII. **Swarm aggregations using artificial potentials and sliding mode control**
GAZİ V.
42ND IEEE CONFERENCE ON DECISION AND CONTROL, VOLS 1-6, PROCEEDINGS, Maui, 9 - 12 December 2003, pp.2041-2046

XLIV. **Formation control of a multi-agent system using decentralized nonlinear servomechanism**
GAZİ V.
42ND IEEE CONFERENCE ON DECISION AND CONTROL, VOLS 1-6, PROCEEDINGS, Maui, 9 - 12 December 2003, pp.2531-2536

XLV. **Stability analysis of social foraging swarms: Combined effects of attractant/repellent profiles**
GAZİ V., Passino K. M.
PROCEEDINGS OF THE 41ST IEEE CONFERENCE ON DECISION AND CONTROL, VOLS 1-4, LAS VEGAS, 10 - 13 December 2002, pp.2848-2853

XLVI. **A class of attraction/repulsion functions for stable swarm aggregations**
GAZİ V., Passino K. M.
PROCEEDINGS OF THE 41ST IEEE CONFERENCE ON DECISION AND CONTROL, VOLS 1-4, LAS VEGAS, 10 - 13 December 2002, pp.2842-2847

XLVII. **Stability analysis of swarms**
GAZİ V., Passino K. M.
PROCEEDINGS OF THE 2002 AMERICAN CONTROL CONFERENCE, VOLS 1-6, ANCHORAGE, 8 - 10 May 2002

XLVIII. **Stability analysis of swarms in an environment with an Attractant/Repellent profile**
GAZİ V., Passino K. M.
PROCEEDINGS OF THE 2002 AMERICAN CONTROL CONFERENCE, VOLS 1-6, ANCHORAGE, 8 - 10 May 2002, vol.16, pp.1819-1824

XLIX. **Decentralized regulation of a class of nonlinear systems**
GAZİ V., Passino K. M.
PROCEEDINGS OF THE 40TH IEEE CONFERENCE ON DECISION AND CONTROL, VOLS 1-5, ORLANDO, 4 - 07 December 2001, pp.3014-3019

L. **Stability of a one-dimensional discrete-time asynchronous swarm**
GAZİ V., Passino K. M.
PROCEEDINGS OF THE 2001 IEEE INTERNATIONAL SYMPOSIUM ON INTELLIGENT CONTROL (ISIC'xx01), Mexico City, Mexico, 5 - 07 September 2001, pp.19-24

LI. **Adaptive control of discrete time nonlinear systems using dynamic structure approximators**
GAZİ V., Passino K. M., Farrel J. A.
PROCEEDINGS OF THE 2001 AMERICAN CONTROL CONFERENCE, VOLS 1-6, ARLINGTON, 25 - 27 June 2001,

pp.3091-3096

LII. **Direct adaptive control using dynamic structure fuzzy systems**
GAZİ V., Passino K. M.
PROCEEDINGS OF THE 2000 AMERICAN CONTROL CONFERENCE, VOLS 1-6, CHICAGO, 28 - 30 June 2000, pp.1954-1958

LIII. **Real-time control system software for intelligent system development: Experiments and an educational program**
GAZİ V., Moore M. L., Passino K. M.
JOINT CONFERENCE ON THE SCIENCE AND TECHNOLOGY OF INTELLIGENT SYSTEMS, GAITHERSBURG, 14 - 17 September 1998, pp.102-107

Supported Projects

Gazi V., TUBITAK Project, Uyarlanır Sürü Denetimi, 2010 - 2014
Gazi V., TUBITAK Project, Parçacık Sürü Optimizasyonu Paralel ve Asenkron Uygulaması Titiz Yakınsaklık İncelemesi ve Çoklu Robot Sistemi Üzerinde Uygulanması, 2007 - 2010
Gazi V., FP6 Project, İnsansız Yardımcı Robotların Koku Kestirimi Yardımı İle Toplu Seyrüseferi İng Group of Unmanned Assistant Robots Deployed In Aggregative Navigation supported by Scent detection GUARDIANS , 2006 - 2010
Gazi V., TUBITAK Project, Robot Sürüleri Grup Koordinasyonu ve Oluşum Kontrolü, 2005 - 2008

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Scholarships

NATO A1 Yurtdışı Doktora Bursu, TUBITAK, 1996 - 1997
Başarı Bursu, Other Government Agencies, 1994 - 1996

Awards

Gazi V., Passino K. M., Andy Sage Best Transactions Paper Award, Ieee Systems Man And Cybernetics Society, June 2005