

# AHMET BUĞRA KOKU

## ASSOC. PROF.

Email : [kbugra@metu.edu.tr](mailto:kbugra@metu.edu.tr)

Office Phone : [+90 312 210 5251](tel:+903122105251)

### International Researcher IDs

ScholarID: 4XwaKIIAAAAJ

ORCID: 0000-0002-4783-1317

Publons / Web Of Science ResearcherID: B-1050-2016

ScopusID: 6602650471

Yoksis Researcher ID: 164170



### Learning Knowledge

Doctorate  
1997 - 2003

Vanderbilt University, Elektrik Elektronik Müh. Böl., United States Of America

Postgraduate  
1994 - 1997

Bogazici University, Institute Of Science, Sistem Ve Kontrol Mühendisliği (YI) (Tezli), Turkey

Undergraduate  
1989 - 1994

Bogazici University, Faculty Of Engineering, Department Of Mechanical Engineering, Turkey

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Egocentric Navigation and its Applications, Vanderbilt University, Elektrik Elektronik Müh. Böl., 2003

Postgraduate, Fusion of soft computing techniques in control applications, Boğaziçi Üniversitesi, Sistem Ve Kontrol Mühendisliği (YI) (Tezli), 1997

### Academic Titles / Tasks

Associate Professor  
2020 - Continues

Middle East Technical University, Faculty of Engineering, Department of Mechanical Engineering

Assistant Professor  
2018 - 2020

Middle East Technical University, Faculty of Engineering, Department of Mechanical Engineering

Assistant Professor  
2004 - 2018

Middle East Technical University, Faculty of Engineering, Department of  
Mechanical Engineering

Lecturer PhD  
2003 - 2004

Middle East Technical University, Faculty of Engineering, Department of  
Mechanical Engineering

Research Assistant  
1995 - 1997

Bogazici University, Faculty Of Engineering

## Supported Projects

1. DÖLEN M., Engiz İ. M., HORASAN A., KOKU A. B., Project Supported by Higher Education Institutions, Görüntü işleme ve duyucu verileri ile kapalı alanlarda konumlama sistemi geliştirilmesi, 2016 - 2016
2. Koku A. B., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, DPT: Engebelilerde Kullanılacak Askeri Amaçlı Robot Taban Tasarımı, 2006 - 2008

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

1. **Mathematical and Machine Learning Approaches for Classification of Protein Secondary Structure Elements from  $\alpha$  Coordinates**  
Sekmen A., Al Nasr K., Bilgin B., KOKU A. B., Jones C.  
Biomolecules, vol.13, no.6, 2023 (SCI-Expanded)
2. **Multiple human trajectory prediction and cooperative navigation modeling in crowded scenes**  
Hacinecipoglu A., KONUKSEVEN E. İ., KOKU A. B.  
INTELLIGENT SERVICE ROBOTICS, vol.13, no.4, pp.479-493, 2020 (SCI-Expanded)
3. **Fast head detection in arbitrary poses using depth information**  
HACINECİPOĞLU A., KONUKSEVEN E. İ., KOKU A. B.  
SENSOR REVIEW, vol.40, no.2, pp.175-182, 2020 (SCI-Expanded)
4. **Localization for mobile robots using skyline in panoramic images**  
KOKU A. B.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.34, no.3, pp.1630-1644, 2019 (SCI-Expanded)
5. **Similarity matrix framework for data from union of subspaces**  
Aldroubi A., Sekmen A., Koku A. B., Cakmak A. F.  
APPLIED AND COMPUTATIONAL HARMONIC ANALYSIS, vol.45, no.2, pp.425-435, 2018 (SCI-Expanded)
6. **Improving the trajectory tracking performance of autonomous orchard vehicles using wheel slip compensation**  
BAYAR G., Bergerman M., KONUKSEVEN E. İ., KOKU A. B.  
BIOSYSTEMS ENGINEERING, vol.146, pp.149-164, 2016 (SCI-Expanded)
7. **Dynamic modeling and parameter estimation for traction, rolling, and lateral wheel forces to enhance mobile robot trajectory tracking**  
BAYAR G., KOKU A. B., KONUKSEVEN E. İ.  
ROBOTICA, vol.33, no.10, pp.2204-2220, 2015 (SCI-Expanded)
8. **Localization and control of an autonomous orchard vehicle**  
BAYAR G., Bergerman M., KOKU A. B., KONUKSEVEN E. İ.  
COMPUTERS AND ELECTRONICS IN AGRICULTURE, vol.115, pp.118-128, 2015 (SCI-Expanded)
9. **Reliability of a Novel Visual Feedback System Developed for Increasing the Efficiency of Posterior Pelvic Tilt Exercise**

- Mengi G., Gencay-Can A., Demirsoy N., Tomsuk E., Koku B., Beyazova M.  
JOURNAL OF MUSCULOSKELETAL PAIN, vol.22, no.3, pp.237-241, 2014 (SCI-Expanded)
10. **Pressure prediction on a variable-speed pump controlled hydraulic system using structured recurrent neural networks**  
KILIÇ E., DÖLEN M., ÇALIŞKAN H., KOKU A. B., Balkan T.  
CONTROL ENGINEERING PRACTICE, vol.26, pp.51-71, 2014 (SCI-Expanded)
  11. **Accurate pressure prediction of a servo-valve controlled hydraulic system**  
KILIÇ E., DÖLEN M., KOKU A. B., ÇALIŞKAN H., Balkan T.  
MECHATRONICS, vol.22, no.7, pp.997-1014, 2012 (SCI-Expanded)
  12. **Position estimation for timing belt drives of precision machinery using structured neural networks**  
KILIÇ E., DOĞRUER C. U., DÖLEN M., KOKU A. B.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.29, pp.343-361, 2012 (SCI-Expanded)
  13. **Outdoor mapping and localization using satellite images**  
DOĞRUER C. U., Koku A. B., Dolen M.  
ROBOTICA, vol.28, pp.1001-1012, 2010 (SCI-Expanded)
  14. **Novel solutions for Global Urban Localization**  
DOĞRUER C. U., KOKU A. B., DÖLEN M.  
ROBOTICS AND AUTONOMOUS SYSTEMS, vol.58, no.5, pp.634-647, 2010 (SCI-Expanded)
  15. **Analysis and estimation of motion transmission errors of a timing belt drive**  
KILIÇ E., DÖLEN M., KOKU A. B.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.18, no.5, pp.883-897, 2010 (SCI-Expanded)
  16. **Comparison of three orientation agreement strategies in self-propelled particle systems with turn angle restrictions in synchronous and asynchronous settings**  
Samiloglu A. T., Gazi V., KOKU A. B.  
ASIAN JOURNAL OF CONTROL, vol.10, no.2, pp.212-232, 2008 (SCI-Expanded)
  17. **An Internet-assisted experimental environment suitable for the reinforcement of undergraduate teaching of advanced control techniques**  
Koku A. B., KAYNAK O.  
IEEE TRANSACTIONS ON EDUCATION, vol.44, no.1, pp.24-28, 2001 (SCI-Expanded)

## Articles Published in Other Journals

1. **Pose invariant people detection in point clouds for mobile robots**  
Hacinecipoglu A., Konukseven E. İ., Koku A. B.  
International Journal of Mechanical Engineering and Robotics Research, vol.9, pp.709-715, 2020 (Scopus)
2. **CUR Decompositions, Similarity Matrices, and Subspace Clustering**  
Aldroubi A., Hamm K., KOKU A. B., Sekmen A.  
Frontiers in Applied Mathematics and Statistics, vol.4, 2019 (Scopus)
3. **Design and implementation of a 3D range scanner for mobile robots**  
ASLAN G., KONUKSEVEN E. İ., Koku B.  
Key Engineering Materials, vol.572, no.1, pp.644-647, 2014 (Scopus)
4. **Yapay Sinir Ağ Modellerinin Valf Denetimli Hidrolik Bir Sistemin Uzun Süreli Basınç Tahmininde Kullanılması**  
KILIÇ E., ÇALIŞKAN H., DÖLEN M., KOKU A. B., BALKAN R. T.  
Mühendis ve Makina, vol.53, pp.50-61, 2012 (Peer-Reviewed Journal)
5. **Design of a Configurable All Terrain Mobile Robot Platform**  
BAYAR G., KOKU A. B., KONUKSEVEN E. İ.  
International Journal of Mathematical Models and Methods in Applied Sciences, vol.3, pp.366-373, 2009 (Scopus)
6. **Global urban localization of an outdoor mobile robot with genetic algorithms**

DOĞRUER C. U., KOKU A. B., DÖLEN M.

Springer Tracts in Advanced Robotics, vol.44, pp.103-112, 2008 (Scopus)

7. **ATV Tabanlı İnsansız Kara Aracı Geliştirilmesi**  
BAYAR G., KONUKSEVEN E. İ., KOKU A. B., BALKAN R. T.  
Makina Tasarım ve İmalat Dergisi, vol.9, pp.55-66, 2007 (Peer-Reviewed Journal)
8. **Novel Position Estimators for Timing Belt Drives**  
KILIÇ E., DÖLEN M., KOKU A. B., DOĞRUER C. U.  
Journal of Automation, Mobile Robotics, and Intelligent Systems, vol.1, no.2, pp.55-61, 2007 (Scopus)
9. **Novel position estimators for timing belt drivers**  
KILIÇ E., DÖLEN M., KOKU A. B., DOĞRUER C. U.  
Journal of Automation Mobile Robotics and Intelligent Systems, vol.1, pp.55-61, 2007 (Scopus)
10. **A Test Setup for Evaluating Long-term Measurement Characteristics of Optical Mouse Sensors**  
KANBUROGLU F. A., DÖLEN M., KOKU A. B.  
Journal of Automation Mobile Robotics and Intelligent Systems, vol.1, pp.71-75, 2007 (Scopus)
11. **Nonlinear Position Estimators based on Artificial Neural Networks for Low Cost Manufacturing Systems**  
KILIÇ E., DÖLEN M., KOKU A. B.  
Journal of Automation, Mobile Robotics, and Intelligent Systems, vol.1, pp.40-44, 2007 (Scopus)
12. **Dokunsal Kuvvet Geri Beslemeli Cihaz Tasarımı**  
BAŞER Ö., KONUKSEVEN E. İ., KOKU A. B.  
Makina Tasarım ve İmalat Dergisi, vol.7, pp.68-78, 2005 (Peer-Reviewed Journal)
13. **Toward egocentric navigation**  
Kawamura K., Koku A. B., Wilkes M., Peters R. A., Sekmen A.  
International Journal of Robotics and Automation, vol.17, no.4, pp.135-145, 2002 (Scopus)

## Books & Book Chapters

1. **Global Urban Localization of Outdoor Mobile Robots using Genetic Algorithms**  
DOĞRUER C. U., KOKU A. B., DÖLEN M.  
in: Springer Tracts in Advanced Robotics, Bruno Siciliano, Oussama Khatib, Frans Groen, Editor, Springer, pp.103-112, 2008
2. **Effects of Asynchronism and Neighborhood Size on Clustering in Self-propelled Particle System**  
ŞAMİLOĞLU A. T., GAZİ V., KOKU A. B.  
in: Computer and Information Sciences – ISCIS 2006 : Lecture Notes in Computer Science, Albert Levi, Erkay Savas, Hüsnü Yenigün, Selim Balcısoy, Yücel Saygın, Editor, Springer, pp.665-676, 2006
3. **Asynchronous Cyclic Pursuit**  
ŞAMİLOĞLU A. T., GAZİ V., KOKU A. B.  
in: From Animals to Animats 9 - Lecture Notes in Artificial Intelligence : Subseries of Lecture Notes in Computer Science, Stefano Nolfi Gianluca Baldassarre Raffaele Calabretta John C. T. Hallam Davide Marocco Jean-Arcady Meyer Orazio Miglino Domenico Parisi, Editor, Springer, pp.667-678, 2006
4. **Perception-Based Navigation for Mobile Robots**  
KAWAMURA k., WİLKES D. M., KOKU A. B., KESKİNPALA T.  
in: Multi-Robot Systems: From Swarms to Intelligent Automata, Schultz, Alan C., Parker, Lynne, Editor, Springer Science, pp.225-234, 2002

## Refereed Congress / Symposium Publications in Proceedings

1. **Using Wheel Slippage for Improved Maneuverability of 4 Wheel Steering Vehicles**  
ATA E., KOKU A. B.

- 11th International Conference on Mechatronics and Control Engineering, ICMCE 2023, Athens, Greece, 29 - 31 January 2023, pp.159-171
2. **Deep Learning for Assignment of Protein Secondary Structure Elements from C Coordinates**  
Nasr K. A., Sekmen A., Bilgin B., Jones C., KOKU A. B.  
2021 IEEE International Conference on Bioinformatics and Biomedicine, BIBM 2021, Virtual, Online, United States Of America, 9 - 12 December 2021, pp.2546-2552
  3. **Automatic Extraction of the Non-Urban Roads from Satellite Images using Artificial Neural Network**  
GHAZIANI M., KONUKSEVEN E. İ., KOKU A. B.  
8th International Symposium on Innovative Technologies in Engineering and Science, Bursa, Turkey, 23 - 25 October 2020, vol.3, no.96, pp.491-500
  4. **Slippage Estimation of Two Wheeled Mobile Robot Using Recurrent Deep Neural Network**  
Özçil O., Koku A. B., Konukseven E. İ.  
2019 International Conference on Artificial Intelligence, Robotics and Control, AIRC 2019, Cairo, Egypt, 14 - 16 December 2019, pp.7-13
  5. **Pose Invariant People Detection in Point Clouds for Mobile Robots**  
Hacinecipoglu A., Konukseven E. İ., Koku A. B.  
2019 The 3rd International Conference on Advances in Artificial Intelligence (ICAAI 2019), İstanbul, Turkey, 26 - 28 October 2019, pp.1-7
  6. **Behavior-Based Approach for Cooperative Control of a Haptic-driven Mobile Robot**  
Mohamadi Y., KONUKSEVEN E. İ., KOKU A. B.  
23rd International Conference on Mechatronics Technology (ICMT), Salerno, Italy, 23 - 26 October 2019
  7. **Slippage Estimation of a two wheeled Mobile Robot using Feedforward Deep Neural Network**  
ÖZÇİL İ., KONUKSEVEN E. İ., KOKU A. B.  
ICCAMMEN 2018, 1st International Conference on Advances in Mechanical and Mechatronics Engineering, Ankara, Turkey, 8 - 09 November 2018
  8. **Enhanced Deep Learning with Improved Feature Subspace Separation**  
PARLAKTUNA M., SEKMEN a., KOKU A. B., ABDUL MALEK A.  
Internatinal Conference on Artificial Intelligence and Data Processing (IDAP 2018), Malatya, Turkey, 28 - 30 September 2018
  9. **To Train or not to Train**  
KOKU A. B., ÇAKIR A., PARLAKTUNA M., SEKMEN A.  
14th IEEE International Conference on Control and Automation, ICCA 2018, Alaska, United States Of America, 12 - 15 June 2018, pp.835-840
  10. **Lazer Mesafe Ölçümü ve Görsel Veri Kullanarak Adaptif Yol Bulma**  
DEMİR S. Ö., ERTOP t. e., KONUKSEVEN E. İ., KOKU A. B.  
Türkiye Robotbilim Konferansı - TORK 2018, İstanbul, Turkey, 12 - 14 April 2018
  11. **Optik Fare Algılayıcılarının Mobil Robotlarda Kullanılarak Konum Tahminlerinin İyileştirilmesi**  
ÖZÇİL İ., KOKU A. B., KONUKSEVEN E. İ.  
TORK 2018, Türkiye Robot Bilim Konferansı, İstanbul, Turkey, 12 - 14 April 2018
  12. **Lazer Mesafe Ölçümü ve Görsel Veri Kullanarak Adaptif Yol Bulma**  
DEMİR S. Ö., ERTOP T. E., KONUKSEVEN E. İ., KOKU A. B.  
TORK 2018 Türkiye Robotbilim Konferansı, İstanbul, Turkey, 12 - 14 April 2018
  13. **Principal Coordinate Clustering**  
SEKMEN a., ALDROUBİ A., HAMM K., KOKU A. B.  
IEEE International Conference on Big Data 2017 (IEEE Big Data2017), Boston, United States Of America, 11 - 14 December 2017
  14. **Unsupervised Deep Learning for Subspace Clustering**  
SEKMEN a., KOKU A. B., PARLAKTUNA M., ABDULMALEK A., VANAMALA N.  
IEEE International Conference on Big Data 2017 (IEEE Big Data2017), Boston, United States Of America, 11 - 14 December 2017
  15. **An Adaptive Approach for Road Boundary Detection Using 2D LIDAR Sensor**

Demir S. O., Ertop T. E., KOKU A. B., KONUKSEVEN E. İ.

IEEE International Conference on Multisensor Fusion and Integration for Intelligent Systems (MFI), Daegu, South Korea, 16 - 18 November 2017, pp.206-211

16. **Matrix resconstruction: Skeleton decomposition versus singular value decomposition**  
SEKMEN a., ALDROUBİ A., KOKU A. B., HAMM K.  
International Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS), Seattle, United States Of America, 9 - 12 July 2017, pp.535-542
17. **Skeleton Decomposition Analysis for Subspace Clustering**  
Sekmen A., Aldroubi A., Koku A. B.  
4th IEEE International Conference on Big Data (Big Data), Washington, Kiribati, 5 - 08 December 2016, pp.1841-1848
18. **Kapalı Alanlarda Robot Konumlaması için Stereo Görüntüler ve Eylemsizlik Duyucusu Kullanılarak Kamera Yörüngesinin Kestirilmesi**  
HORASAN A., İSMAİL E., DÖLEN M., KOKU A. B.  
Türkiye Robotbilim Konferansı (ToRK-2016), İstanbul, Turkey, 2 - 03 November 2016, vol.1
19. **A Conditional Coverage Path Planning Method for an Autonomous Lawn Mower**  
KAROL A., KONUKSEVEN E. İ., KOKU A. B., ÇİÇEK S.  
17. Uluslararası Makina Tasarım ve İmalat Kongresi, Bursa, Turkey, 12 - 15 July 2016
20. **2 Boyutlu ve 3 Boyutlu Görsel Geri Beslemenin ve Ekran Büyüklüğünün Uzaktan Araç Kontrolü Üzeindeki Etkisi**  
ÖLMEZ H., KONUKSEVEN E. İ., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK14), Kocaeli, Turkey, 11 - 13 September 2014, pp.523-527
21. **Üç Boyutlu Haritalama ve Konumlama Uygulamaları için Donanım ve Yazılım Platformu Geliştirilmesi**  
HACINECİPOĞLU A., KOKU A. B., KONUKSEVEN E. İ.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK14), Kocaeli, Turkey, 11 - 13 September 2014, pp.573-577
22. **A New Hardware-in-the-Loop Simulator for Control Engineering Education**  
USENMEZ S., YAMAN U., DOLEN M., KOKU A. B.  
IEEE Global Engineering Education Conference, İstanbul, Turkey, 3 - 05 April 2014, pp.1-8
23. **Manuel Sürülen Platform Üzerinde SLAM Uygulaması**  
HACINECİPOĞLU A., DEMİR S. Ö., UĞURLU M. Ç., KOKU A. B., KONUKSEVEN E. İ.  
Türkiye Otonom Robotlar Konferansı (TORK), Turkey, 01 January 2014
24. **Hareketli Robot Dinamik Modelinin Tekerlek Kuvvetleri Kullanılarak İyileştirilmesi**  
BAYAR G., KOKU A. B., KONUKSEVEN E. İ.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK13), Malatya, Turkey, 26 - 28 September 2013
25. **Hareket Denetimi Uygulamalarında Kullanılan Sayısal Filtrelerin FPGA ile Gerçekleştirilmesi**  
YAMAN U., MUTLU B. R., DÖLEN M., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK13), Malatya, Turkey, 26 - 28 September 2013, pp.388-393
26. **A Comparative Study on Distance Metrics in Self- Supervised Unstructured Road Detection Domain**  
ÖZÜTEMİZ K. B., HACINECİPOĞLU A., KOKU A. B., KONUKSEVEN E. İ.  
Mechatronics and Machine Vision in Practice, M2VIP, 2013, Ankara, Turkey, 20 September 2013
27. **Histogram-Based Thresholding Method for Extracting Non- Urban Roads from Satellite Images**  
GHAZİANİ M., MOHAMADİ Y., KONUKSEVEN E. İ., KOKU A. B.  
Mechatronics and Machine Vision in Practice, M2VIP, 2013, Ankara, Turkey, 20 September 2013
28. **A Histogram-based Thresholding Method for Extracting non-urban Roads from Satellite Images**  
GHAZİANİ M., MOHAMADİ Y., KONUKSEVEN E. İ., KOKU A. B.  
The 20th Int. Conf. on Mechatronics and Machine Vision in Practice- M2ViP, 18 - 20 September 2013
29. **Adaptive unstructured road detection using close range stereo vision**  
ÖZÜTEMİZ K. B., Hacinecipoglu A., KOKU A. B., KONUKSEVEN E. İ.  
2013 9th Asian Control Conference, ASCC 2013, İstanbul, Turkey, 23 - 26 June 2013
30. **Self-learning Road Detection with Stereo Vision**  
Ozudemiz K. B., Hacinecipoglu A., KOKU A. B., KONUKSEVEN E. İ.

21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013

31. **Stereo Görüntü ile Kendi Kendine Öğrenen Yol Saptama**  
ÖZÜTEMİZ K. B., HACINECİPOĞLU A., KOKU A. B., KONUKSEVEN E. İ.  
Signal Processing and Communications Applications Conference (SIU13), Girne, Cyprus (Kkct), 23 - 25 April 2013
32. **Extraction of unstructured roads from satellite images using binary image segmentation**  
GHAZİANİ M., MOHAMADİ Y., KOKU A. B., KONUKSEVEN E. İ.  
Signal Processing and Communications Applications Conference (SIU13), Girne, Cyprus (Kkct), 23 - 25 April 2013
33. **Evaluation of Haptic Feedback Cues on Vehicle Teleoperation Performance in an Obstacle Avoidance Scenario**  
HACINECİPOĞLU A., KONUKSEVEN E. İ., KOKU A. B.  
IEEE World Haptics Conference (WHC), Daejeon, South Korea, 14 - 18 April 2013, pp.689-694
34. **A New Hardware-in-the-Loop Simulator for CNC Machine Applications**  
USENMEZ S., MUTLU B. R., Yaman U., KILIÇ E., Dolen M., Koku A. B.  
IEEE International Conference on Mechatronics (ICM), Vicenza, Italy, 27 February - 01 March 2013
35. **Mobil Robotlar için Tarama Platformunun Tasarımı ve Uygulaması**  
ASLAN G., KONUKSEVEN E. İ., KOKU A. B.  
TİMAK 2012 - Tasarım İmalat ve Analiz Kongresi, Balıkesir, Turkey, 29 - 30 November 2012
36. **Yapay Sinir Ağ Modellerinin Valf Denetimli Hidrolik Bir Sistemin Uzun Süreli Basınç Tahmininde Kullanılması**  
KILIÇ E., ÇALIŞKAN H., DÖLEN M., KOKU A. B., BALKAN R. T.  
VI. Ulusal Hidrolik Pnömatik Kongresi, İzmir, Turkey, 12 - 15 October 2011
37. **Comparison of Kinect and Bumblebee2 in Indoor Environments**  
TARÇIN S., ÖZÜTEMİZ K. B., KOKU A. B., KONUKSEVEN E. İ.  
12th International Workshop on Research and Education in Mechatronics (REM), Kocaeli, Turkey, 15 - 16 September 2011
38. **Long-term prediction of hydraulic system dynamics via structured recurrent neural networks**  
KILIÇ E., DÖLEN M., KOKU A. B.  
2011 IEEE International Conference on Mechatronics, ICM 2011, İstanbul, Turkey, 13 - 15 April 2011, pp.330-335
39. **Rapid training data generation from image sequences for pattern recognition**  
DİLAN R. A., KOKU A. B., KONUKSEVEN E. İ.  
2011 IEEE International Conference on Mechatronics, ICM 2011, İstanbul, Turkey, 13 - 15 April 2011, pp.457-462
40. **Experimental evaluation of cable drum systems as linear motion sensors**  
KILIÇ E., DÖLEN M., KOKU A. B.  
IEEE International Conference on Mechatronics (ICM 2011), 13 - 15 April 2011, pp.666-671
41. **Decoding Process and Characterization Studies of a 2D Laser Scanning Range Finder**  
BAYAR G., KOKU A. B., KONUKSEVEN E. İ.  
AzC IFToMM 2010 International Symposium of Mechanism and Machine Science, İzmir, Turkey, 5 - 08 October 2010, pp.295-299
42. **Geri Besleme Doğrusallaştırması Yöntemiyle Hareketli Robotlarda Düz Çizgi Takibi**  
ŞAMİLOĞLU A. T., GAZİ V., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK10), Kocaeli, Turkey, 21 - 23 September 2010
43. **Theoretical and experimental determination of dynamic friction coefficient for a cable-drum system**  
BAYAR G., KONUKSEVEN E. İ., KOKU A. B.  
3rd European Conference on Mechanism Science, EUCOMES 2010, Cluj-Napoca, Romania, 14 - 18 September 2010, vol.5, pp.345-352
44. **Sliding Mode Control of a Power Screw Driven Positioning Table**  
BAYAR G., KONUKSEVEN E. İ., KOKU A. B.  
3rd International Conference on Advanced Design and Manufacture, Nottingham, United Kingdom, 8 - 10 September 2010, vol.450, pp.325-328
45. **Design of Circling Around a Target Controllers for Mobile Robots by Feedback Linearization**  
ŞAMİLOĞLU A. T., GAZİ V., KOKU A. B.

IFAC Workshop on Adaptation and Learning in Control and Signal Processing, 26 - 28 August 2010, vol.43, pp.138-143

46. **A novel command generation method with variable feedrate utilizing FPGA for motor drives**  
Yarnan U., DÖLEN M., KOKU A. B.  
2010 8th IEEE Workshop on Intelligent Solutions in Embedded Systems, WISES 2010, Heraklion, Greece, 8 - 09 July 2010, pp.67-72
47. **A Novel Command Generation Method with Variable Feedrate utilizing FGPA for Motor Drives**  
YAMAN U., DÖLEN M., KOKU A. B.  
IEEE Workshop on Intelligent Solutions in Embedded Systems (WISES), Heraklion, Greece, 8 - 09 July 2010, vol.1, pp.67-72
48. **Development of a Steered Unmanned Ground Electric Vehicle Research Platform**  
BAYAR G., KOKU A. B., KONUKSEVEN E. İ.  
International Unmanned Vehicles Workshop, İstanbul, Turkey, 10 June 2010, pp.117-124
49. **Hareketli Bir Platform İçin Yüzey Değişimlerinin Kayma Geçişleri Kullanılarak Bulunması**  
BAYAR G., KOKU A. B., KONUKSEVEN E. İ.  
5. Otomotiv Teknolojileri Kongresi OTEKON 2010, Bursa, Turkey, 7 - 08 June 2010
50. **Direct Command Generation Methods for Servo-Motor Drives**  
YAMAN U., MUTLU B. R., DÖLEN M., KOKU A. B.  
12th International Conference on Electrical Machines and Systems, Tokyo, Japan, 15 - 18 November 2009, pp.1354-1359
51. **Performance Evaluation of Different Real-Time Motion Controller Topologies Implemented on a FPGA**  
MUTLU B. R., YAMAN U., DÖLEN M., KOKU A. B.  
12th International Conference on Electrical Machines and Systems, Tokyo, Japan, 15 - 18 November 2009, pp.902-907
52. **Real-time hardware-in-the-loop simulation of electrical machine systems using FPGAs**  
ÜŞENMEZ S., DILAN R., DÖLEN M., KOKU A. B.  
12th International Conference on Electrical Machines and Systems, ICEMS 2009, Tokyo, Japan, 15 - 18 November 2009
53. **Kayan Kipli DC Motor Konum Denetiminin FPGA ile Gerçekleştirilmesi**  
MUTLU B. R., YAMAN U., DÖLEN M., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK09), İstanbul, Turkey, 13 - 16 October 2009
54. **Gezer Bir Robot için Hedef Takibi ve Dairesel Yörüngede Seyir**  
ŞAMİLOĞLU A. T., GAZİ V., KOKU A. B., LEBLEBİCİOĞLU M. K.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK09), İstanbul, Turkey, 13 - 16 October 2009
55. **Bilgisayar Denetimli Takım Tezgahları için Dağıtık bir Hareket Denetim Sistemi**  
KANBUROGLU F. A., KILIÇ E., DÖLEN M., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK09), İstanbul, Turkey, 13 - 16 October 2009
56. **Endüstriyel Kontrol Uygulamaları için Komut Üretim Yöntemleri**  
YAMAN U., DÖLEN M., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK09), Turkey, 13 - 16 October 2009
57. **Bir Doğru Akım Motorunun FPGA Üzerinde Gerçek Zamanlı Benzetiminin Gerçekleştirilmesi**  
ÜŞENMEZ s., DİLAN R. A., DÖLEN M., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK09), İstanbul, Turkey, 13 - 16 October 2009
58. **Endüstriyel Kontrol Uygulamaları İçin Komut Üretim Yöntemleri**  
YAMAN U., DÖLEN M., KOKU A. B.  
Otomatik Kontrol Ulusal Toplantısı, TOK2009, İstanbul, Turkey, 13 - 16 October 2009
59. **CoMoRAT: A Configurable All Terrain Mobile Robot**  
BAYAR G., KOKU A. B., KONUKSEVEN E. İ.  
11th WSEAS International Conference on AUTOMATIC CONTROL, MODELLING and SIMULATION (ACMOS 'xx09), İstanbul, Turkey, 30 May - 01 June 2009, vol.507



60. **Dışli Kayış Mekanizmalarında İletim Hatalarının İncelenmesi**  
KILIÇ E., DÖLEN M., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK08), İstanbul, Turkey, 13 - 15 November 2008
61. **Çoklu Robot Uygulamaları İçin Bir Deney Düzenegi**  
ŞAMILOĞLU A. T., ÇAYIRPUNAR Ö., GAZİ V., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK08), İstanbul, Turkey, 13 - 15 November 2008
62. **Çevrimiçi Donanım Benzetimi için Yeni bir Yazılım Paketi: Cadmus**  
ÜŞENMEZ s., DİLAN R. A., YAMAN U., MUTLU B. R., DÖLEN M., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK08), İstanbul, Turkey, 13 - 15 November 2008
63. **Sayısal Kontrol Mühendisliği Eğitiminde Yeni Araçlar ve Yaklaşımlar**  
MUTLU B. R., YAMAN U., ÜŞENMEZ s., DİLAN R. A., DÖLEN M., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK08), İstanbul, Turkey, 13 - 15 November 2008
64. **Çevrimiçi Donanım Benzetimi İçin Yeni bir Yazılım Paketi Cadmus**  
ÜŞENMEZ S., DİLAN R. A., YAMAN U., MUTLU B. R., DÖLEN M., KOKU A. B.  
Otomatik Kontrol Ulusal Toplantısı, TOK2008, İstanbul, Turkey, 13 - 15 November 2008, vol.1, pp.685-691
65. **An Experimentail Set-up for Multi-Robot Applications**  
ŞAMILOĞLU A. T., ÇAYIRPUNAR Ö., GAZİ V., KOKU A. B.  
Int. Conf. on Simulation, Modeling and Programming for Autonomous Robots (SIMPAN) 2008, 3 - 04 November 2008, pp.539-550
66. **Mobile Robot Heading Adjustment Using Radial Basis Function Neural Networks Controller and Reinforcement Learning**  
BAYAR G., KONUKSEVEN E. İ., KOKU A. B.  
4TH WSEAS/IASME INTERNATIONAL CONFERENCE ON DYNAMICAL SYSTEMS AND CONTROLS, 26 - 28 October 2008, pp.169-174
67. **Global Urban Localization of Outdoor Mobile Robots Using Satellite Images**  
DOĞRUER C. U., Koku B., DÖLEN M.  
IEEE/RSJ International Conference on Intelligent Robots and Systems, Nice, France, 22 - 26 September 2008, pp.3927-3928
68. **Design and Implementation of a Modular and Open-For-Development Rapid Prototyping System**  
YARKINOĞLU O., YAZICIOĞLU F., Söylemez E., KOKU A. B.  
Proc. of the 13th International Conference on Machine Design and Production (UMTIK 2008), İstanbul, Turkey, 3 - 05 September 2008
69. **Graduate Student Education in Discrete-time Control**  
YAMAN U., ÜŞENMEZ s., MUTLU B. R., DÖLEN M., KOKU A. B.  
Proc. of the 13th International Conference on Machine Design and Production (UMTIK 2008), İstanbul, Turkey, 3 - 05 September 2008
70. **i-RoK: A Human Like Robotic Head**  
ÖLÇÜCÜOĞLU O., KOKU A. B., KONUKSEVEN E. İ.  
7th IEEE/RAS International Conference on Humanoid Robots, Pennsylvania, United States Of America, 29 September - 01 December 2007, pp.442-446
71. **A novel soft-computing technique to segment satellite images for mobile robot localization and navigation**  
DOĞRUER C. U., Koku B., DÖLEN M.  
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.2077-2082
72. **Kendinden İtmeli Parçacık Sistemlerinde Üç Farklı Ortak Yön Bulma Stratejisi: Bölüm 2-Eş Zamansız Model**  
ŞAMILOĞLU A. T., GAZİ V., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK07), İstanbul, Turkey, 5 - 07 September 2007
73. **Kendinden İtmeli Parçacık Sistemlerinde Üç Farklı Ortak Yön Bulma Stratejisi: Bölüm 1-Eş Zamanlı Model**

- ŞAMİLOĞLU A. T., GAZİ V., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK07), İstanbul, Turkey, 5 - 07 September 2007
74. **Oğul Robot Sistemleri İçin Basit bir Görüntüleme Sistemi Tasarımı**  
ÇELİKKANAT H., TURGUT A. E., ŞAHİN E., KOKU A. B.  
Otomatik Kontrol Ulusal Toplantısı. TOK'06, Ankara, Turkey, 6 - 08 November 2006, pp.1-6
75. **Oğul Robot Sistemleri için Basit Bir Görüntüleme Sistemi Tasarımı**  
ÇELİKKANAT H., TURGUT A. E., ŞAHİN E., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK06), Ankara, Turkey, 6 - 08 November 2006
76. **Gezgin Robotların Görüntü Tabanlı Pozisyon Kestirimi**  
KOKU A. B., TORA H.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK06), Ankara, Turkey, 6 - 08 November 2006
77. **Oğul-Robot Sistemleri için Sinyalleşme Sistemi Tasarımı**  
TURGUT A. E., ÇAKMAK M., ŞAHİN E., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK06), Ankara, Turkey, 6 - 08 November 2006
78. **Sürü Robotbilimi ve Çok-Erkinli Sistemlerdeki Koordinasyon Problemleri**  
ŞAMİLOĞLU A. T., GAZİ V., KOKU A. B.  
Türk Otomatik Kontrol Ulusal Toplantısı (TOK06), Ankara, Turkey, 6 - 08 November 2006
79. **Effects of asynchronism and neighborhood size on clustering in self-propelled particle systems**  
Şamiloğlu A. T., Gazi V., KOKU A. B.  
ISCIS 2006: 21th International Symposium on Computer and Information Sciences, İstanbul, Turkey, 1 - 03 November 2006, pp.665-676
80. **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
81. **Askeri Amaçlı Hareketli Robot Platformu Tasarımı**  
BAYAR G., KONUKSEVEN E. İ., KOKU A. B.  
3. Savunma Teknolojileri Kongresi SAVTEK 06, Ankara, Turkey, 29 - 30 June 2006
82. **Experiences From Two Consecutive Senior Level Mechatronic Courses: Enhancing Creativity Through Design**  
AKÖNER M., KOKU A. B., AZGIN K.  
MECHATRONICS 2006: The 10th Mechatronics Forum Biennial International Conference, Malvern, PA, United States Of America, 19 - 21 June 2006
83. **A Vision Based Optical Dead-Reckoning System**  
TORA H., KOKU A. B., SEKMEN a.  
MECHATRONICS 2006: The 10th Mechatronics Forum Biennial International Conference, Malvern, PA, United States Of America, 19 - 21 June 2006
84. **ARAŞTIRMA AMAÇLI MODULER BİR HAREKETLİ ROBOT PLATFORMU TASARIMI**  
BAYAR G., KOKU A. B., KONUKSEVEN E. İ.  
TİMAK 2006 - Tasarım İmalat ve Analiz Kongresi ve CAD-CAM Günleri 'xx06, Balıkesir, Turkey, 26 - 28 April 2006
85. **Antropomorfik Bir Robot Boyun/Baş Tasarımı**  
ÖLÇÜCÜOĞLU O., KOKU A. B., KONUKSEVEN E. İ.  
TİMAK 2006 - Tasarım İmalat ve Analiz Kongresi ve CAD-CAM Günleri 'xx06, Balıkesir, Turkey, 26 - 28 April 2006
86. **Arastirma Amaçli Modüler bir Hareketli Robot Platformu Tasarimi**  
BAYAR G., KOKU A. B., KONUKSEVEN E. İ.  
TİMAK-Tasarım İmalat Analiz Kongresi, Balıkesir, Turkey, 26 - 28 April 2006, pp.443-451
87. **Evaluation of egocentric navigation methods**  
ALTUN K., KOKU A. B.  
14th IEEE Workshop on Robot and Human Interactive Communication, RO-MAN 2005, Nashville, TN, United States Of America, 13 - 15 August 2005, vol.2005, pp.396-401
88. **A Software Package to Facilitate Teaching Introductory Level Mechatronics**

BAYAR G., ÖLÇÜCÜOĞLU O., KOKU A. B., SEKMEN a.

ASEE Annual Conference, Portland, OR, United States Of America, 12 - 15 June 2005

89. **Knowledge-sharing techniques for Egocentric Navigation**  
KESKİNPALA T., KOKU A. B., WİLKES D. M., KAWAMURA k.  
SMC'xx03 Conference Proceedings. 2003 IEEE International Conference on Systems, Man and Cybernetics.  
Conference Theme - System Security and Assurance (Cat. No.03CH37483), Washington, DC, USA, 5 - 08 October 2003, pp.2469-2476
90. **Human robot interaction via cellular phones**  
SEKMEN a., KOKU A. B., ZEİNSABATTO S.  
SMC'xx03 Conference Proceedings. 2003 IEEE International Conference on Systems, Man and Cybernetics.  
Conference Theme - System Security and Assurance (Cat. No.03CH37483), Washington, United States Of America, 5 - 08 October 2003, pp.3937-3942
91. **A novel approach for robot homing**  
KOKU A. B., SEKMEN a., WİLKES D. M.  
Proceedings of 2003 IEEE Conference on Control Applications, 2003. CCA 2003., Istanbul, Turkey, 25 - 27 June 2003
92. **Development of a desktop robot for robotics education**  
Sekmen A., Koku A. B.  
6th World Multi-Conference on Systemics, Cybernetics and Informatics (SCI 2002)/8th International Conference on Information Systems Analysis and Synthesis (ISAS 2002), Florida, United States Of America, 14 - 18 July 2002, pp.300-305
93. **Color-based object tracking to improve mobile robot navigation**  
Keskinpala T., Koku A. B., Keskinpala H.  
6th World Multi-Conference on Systemics, Cybernetics and Informatics (SCI 2002)/8th International Conference on Information Systems Analysis and Synthesis (ISAS 2002), Florida, United States Of America, 14 - 18 July 2002, pp.40-45
94. **Enhancing a human-robot interface using sensory egosphere**  
JOHNSON C., Koku A. B., KAWAMURA K., Peters R.  
19th IEEE International Conference on Robotics and Automation (ICRA), Washington, Kiribati, 11 - 15 May 2002, pp.4132-4137
95. **Perception-based navigation for mobile robots**  
Kawamura K., Wilkes D., Koku A. B., Keskinpala T.  
Workshop on Multi-Robot Systems, Washington, Kiribati, 01 March 2002, pp.225-234
96. **Toward perception-based navigation using EgoSphere**  
Kawamura K., Peters II R., Wilkes D., Koku A. B., Sekmen A.  
Mobile Robots XVI, Newton, MA, United States Of America, 29 - 30 October 2001, vol.4573, pp.137-147
97. **Important factors in mobile robot user interface design**  
Sekmen A., Goldman S., Koku A. B., Zein-Sabatto S., Wilkes M.  
5th World Multi-Conference on Systemics, Cybernetics and Informatics (SCI2001)/7th International Conference on Information Systems Analysis and Synthesis (ISAS 2001), Florida, United States Of America, 22 - 25 July 2001, pp.305-310
98. **Towards socially acceptable robots**  
Koku A. B., SEKMEN A., ALFORD A.  
IEEE International Conference on Systems, Man and Cybernetics, Tennessee, United States Of America, 8 - 11 October 2000, pp.894-899
99. **Comparison of soft-computing and conventional methodologies in control of servo systems**  
EFE M. Ö., Koku A. B., KAYNAK O.  
24th Annual Conference of the IEEE Industrial-Electronics-Society, Aachen, Germany, 31 August - 04 September 1998, pp.75-80

## Episodes in the Encyclopedia

### 1. Türkiye Bilişim Ansiklopedisi

KOKU A. B., KAYNAK O.

Papatya Bilim, pp., 2006

## Academic and Administrative Experience

---

2008 - 2011	<b>Deputy Head of Department</b>	Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü
-------------	--------------------------------------	---

---

## Courses

Design of Intelligent Machines, Postgraduate, 2021 - 2022, 2020 - 2021

MECHATRONIC DESIGN, Undergraduate, 2019 - 2020, 2017 - 2018

INTRODUCTION TO MECHATRONICS, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019

COMPUTER CONTROL OF MACHINES, Postgraduate, 2019 - 2020

MECHATRONIC COMPONENTS AND INSTRUMENTATION, Undergraduate, 2019 - 2020

## Advising Theses

KOKU A. B., Development of synthetic and real-world pose estimation dataset to be used in human tracking system, Postgraduate, M.ERSOY(Student), 2022

KOKU A. B., Precise external positioning of machine tools using angular measurements from digital cameras, Postgraduate, İ.EGE(Student), 2022

KOKU A. B., Topological navigation algorithm design and analysis using spherical images, Postgraduate, Y.ŞAHİN(Student), 2022

KOKU A. B., Development of an indoor reactive topological navigation method using spherical images, Postgraduate, Y.ŞAHİN(Student), 2021

Koku A. B., OUTDOOR LOCALIZATION OF A ROBOTIC PLATFORM USING PANAROMIC IMAGES, Postgraduate, G.CEREN(Student), 2021

Koku A. B., DEEP LEARNING APPLICATIONS IN MECHATRONICS, Postgraduate, H.MATPAN(Student), 2021

Konukseven E. İ., Koku A. B., OBSTACLE AVOIDANCE CONTROL FOR A HUMAN-OPERATED MOBILE ROBOT, Postgraduate, Y.MOHAMADI(Student), 2019

Konukseven E. İ., Koku A. B., HUMAN AWARE NAVIGATION OF A MOBILE ROBOT IN CROWDED DYNAMIC ENVIRONMENTS, Doctorate, A.HACINECİPOĞLU(Student), 2019

KOKU A. B., KONUKSEVEN E. İ., Slippage estimation of a two wheeled mobile robot using deep neural network, Postgraduate, İ.ÖZÇİL(Student), 2018

KOKU A. B., KONUKSEVEN E. İ., Adaptive structured and unstructured road detection using LIDAR and dome-camera, Postgraduate, S.ÖZGÜN(Student), 2017

KOKU A. B., KONUKSEVEN E. İ., Realization of virtual fluid environment on a robotic gait trainer for therapeutic purposes, Postgraduate, T.EFE(Student), 2017

KOKU A. B., KONUKSEVEN E. İ., A CONDITIONAL COVERAGE PATH PLANNING METHOD FOR AN AUTONOMOUS LAWN MOWER, Postgraduate, A.KAROL(Student), 2016

KOKU A. B., KONUKSEVEN E. İ., Development of a mobile robot platform to be used in mobile robot research, Postgraduate, M.KASIM(Student), 2013

KOKU A. B., Fast feature extraction from 3D point cloud, Postgraduate, S.TARÇIN(Student), 2013

KOKU A. B., KONUKSEVEN E. İ., GPU-accelerated adaptive unstructured road detection using close range stereo vision,

Postgraduate, K.BUĞRA(Student), 2013  
KOKU A. B., Decentralized coordination and control in robotic swarms, Doctorate, A.TÖRE(Student), 2012  
KONUKSEVEN E. İ., KOKU A. B., Development of electrical and control system of an unmanned ground vehicle for force feedback teleoperation, Postgraduate, A.Hacınecipoğlu(Student), 2012  
KOKU A. B., Trajectory tracking control of unmanned ground vehicles in mixed terrain, Doctorate, G.BAYAR(Student), 2012  
KONUKSEVEN E. İ., KOKU A. B., Design and implementation of a scanning platform for mobile robotics, Postgraduate, G.Aslan(Student), 2012  
KOKU A. B., DÖLEN M., Design of an integrated hardware-in-the-loop simulation system, Postgraduate, S.ÜŞENMEZ(Student), 2010  
KOKU A. B., Design, development and manufacturing of an all terrain modular robot platform, Postgraduate, M.CİHANGİR(Student), 2010  
KONUKSEVEN E. İ., KOKU A. B., Unstructured road recognition and following for mobile robots via image processing using anns, Postgraduate, R.AŞKIN(Student), 2010  
KOKU A. B., Global urban localization of an outdoor mobile robot using satellite images, Doctorate, C.Ulaş(Student), 2009  
KOKU A. B., DÖLEN M., Global urban localization of an outdoor mobiler robot using satellite images, Doctorate, C.ULAŞ(Student), 2009  
KOKU A. B., Enhancing Posterior Pelvic Tilt Exercise By Providing Motivation Inducing Feedback to the Patient, Postgraduate, E.Tomsuk(Student), 2008  
KOKU A. B., Enhancing posterior pelvic tilt exercise by motivation inducing feedback to the patient, Postgraduate, E.TOMSUK(Student), 2008  
KOKU A. B., Guidelines for building experimental mobile robots with off-the-shelf components, Postgraduate, A.GÜRCAN(Student), 2008  
KOKU A. B., Modular embedded system design / implementation for mechatronic education and research, Postgraduate, A.Özgü(Student), 2007  
KOKU A. B., Design of an image acquisition setup for mimic tracking, Postgraduate, Ö.MİNE(Student), 2007  
KOKU A. B., Human-like robot head design, Postgraduate, O.ÖLÇÜCÜOĞLU(Student), 2007  
KOKU A. B., Computer aided manufacturing (CAM) data generation for solid freeform fabrication, Postgraduate, O.Yarkınoğlu(Student), 2007  
KOKU A. B., DÖLEN M., Modular embedded system design/implementation for mechatronics education and research, Postgraduate, A.ÖZGÜ(Student), 2007  
KOKU A. B., SÖYLEMEZ E., Computer aided manufacturing (CAM) data generation for solid freeform fabricaton, Postgraduate, O.YARKINOĞLU(Student), 2007  
KOKU A. B., Configurable robot base design for mixed terrain applications, Postgraduate, G.BAYAR(Student), 2005

## Patent

KOKU A. B., Görsel dikkat ölçme sistemi, Patent, CHAPTER A Human Needs, Standard Registration, 2016  
KOKU A. B., SÜMER H. C., İki kol koordinasyon sistemi, Patent, CHAPTER A Human Needs, Standard Registration, 2015  
KOKU A. B., Çift yönlü çalışan süspansiyon, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, Standard Registration, 2013  
KOKU A. B., Hız ve mesafe tahmini test cihazı, Patent, CHAPTER A Human Needs, Standard Registration, 2012  
KOKU A. B., Tepki hızı tespit cihazı, Patent, CHAPTER A Human Needs, Standard Registration, 2012  
KOKU A. B., Kordinasyon ve hakimiyet test cihazı, Patent, CHAPTER A Human Needs, Standard Registration, 2012

## Metrics

Publication: 135

Citation (WoS): 279

Citation (Scopus): 468

H-Index (WoS): 9

H-Index (Scopus): 10

## Research Areas

Neural Networks, Mechanical Engineering, Machine Theory and Dynamics, Robotics, Mechatronics, Engineering and Technology

## Non Academic Experience

TÜBİTAK