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Kişisel Bilgiler

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Eğitim Bilgileri

Doktora, Marmara Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar-Kontrol Eğitimi (YI) (Tezli), Türkiye 2008 - 2014

Yüksek Lisans, Marmara Üniversitesi, Fen Bilimleri Enstitüsü, Elektronik Ve Bilgisayar Eğitimi (YI) (Tezli), Türkiye 2005 - 2008

Lisans, Marmara Üniversitesi, Teknik Eğitim Fakültesi, Elektronik ve Bilgisayar Eğitimi Bölümü, Türkiye 2001 - 2005

Yaptığı Tezler

Doktora, Sinyal işleme ve genetik-yapay sinir ağları ile rulman arızalarının teşhisi, Marmara Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar-Kontrol Eğitimi (YI) (Tezli), 2014

Yüksek Lisans, PID kontrolörün karınca kolonisi / genetik algoritma tabanlı optimizasyonu ve Gunt RT 532 basınç prosesinin kontrolü, Marmara Üniversitesi, Fen Bilimleri Enstitüsü, Elektronik Ve Bilgisayar Eğitimi (YI) (Tezli), 2008

Akademik Unvanlar / Görevler

Yrd. Doç. Dr., Marmara Üniversitesi, Teknoloji Fakültesi, Mekatronik Mühendisliği Bölümü, 2015 - Devam Ediyor
Araştırma Görevlisi, Marmara Üniversitesi, Teknik Eğitim Fakültesi, Elektronik ve Bilgisayar Eğitimi Bölümü, 2005 - Devam Ediyor

Araştırma Görevlisi, Marmara Üniversitesi, Teknoloji Fakültesi, Mekatronik Mühendisliği Bölümü, 2015 - 2015

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Development of comprehensive heterodyne effect based inspection (CHEBI) method for inclusive monitoring of cracks**
Baghalian A., Tashakori S., Senyurek V. Y., ÜNAL M., McDaniel D., Tansel I. N.
MEASUREMENT, cilt.128, ss.89-95, 2018 (SCI-Expanded)
- II. **Implementation of heterodyning effect for monitoring the health of adhesively bonded and fastened composite joints**
Tashakori S., Baghalian A., Senyurek V. Y., ÜNAL M., McDaniel D., Tansel I. N.
APPLIED OCEAN RESEARCH, cilt.72, ss.51-59, 2018 (SCI-Expanded)
- III. **Fault Diagnosis of Rolling Bearings Using Data Mining Techniques and Boosting**
Ünal M., Sahin Y., Onat M., Demetgul M., Küçük H.
JOURNAL OF DYNAMIC SYSTEMS MEASUREMENT AND CONTROL-TRANSACTIONS OF THE ASME, cilt.139, sa.2, 2017 (SCI-Expanded)
- IV. **Contact and non-contact approaches in load monitoring applications using surface response to excitation method**
Tashakori S., Baghalian A., ÜNAL M., Fekrmandi H., Senyurek V. Y., McDaniel D., Tansel I. N.

MEASUREMENT, cilt.89, ss.197-203, 2016 (SCI-Expanded)

- V. **A novel approach for classification of loads on plate structures using artificial neural networks**
Fekrmandi H., ÜNAL M., Neva S. R., Tansel I. N., McDaniel D.
MEASUREMENT, cilt.82, ss.37-45, 2016 (SCI-Expanded)
- VI. **Fault diagnosis of rolling bearings using a genetic algorithm optimized neural network**
Ünal M., Onat M., Demetgul M., Küçük H.
MEASUREMENT, cilt.58, ss.187-196, 2014 (SCI-Expanded)
- VII. **Use of Artificial Neural Networks for Modelling of Seam Strength and Elongation at Break**
YILDIZ Z., Dal V., ÜNAL M., YILDIZ K.
FIBRES & TEXTILES IN EASTERN EUROPE, cilt.21, sa.5, ss.117-123, 2013 (SCI-Expanded)
- VIII. **Use of Artificial Neural Networks for Modelling of Seam Strength and Elongation at Break FIBRES TEXTILES in Eastern Europe**
YILDIZ Z., DAL V., ÜNAL M., YILDIZ K.
FIBRES & TEXTILES in Eastern Europe, cilt.5, ss.117-123, 2013 (SCI-Expanded)
- IX. **Genetic Algorithm**
ÜNAL M., AK A., TOPUZ V., ERDAL H.
OPTIMIZATION OF PID CONTROLLERS USING ANT COLONY AND GENETIC ALGORITHMS, cilt.449, ss.19-29, 2013 (SCI-Expanded)
- X. **Optimization of PID Controllers Using Ant Colony and Genetic Algorithms Introduction**
ÜNAL M., AK A., TOPUZ V., ERDAL H.
OPTIMIZATION OF PID CONTROLLERS USING ANT COLONY AND GENETIC ALGORITHMS, cilt.449, ss.1-3, 2013 (SCI-Expanded)
- XI. **Ant Colony Optimization (ACO)**
ÜNAL M., AK A., TOPUZ V., ERDAL H.
OPTIMIZATION OF PID CONTROLLERS USING ANT COLONY AND GENETIC ALGORITHMS, cilt.449, ss.31-35, 2013 (SCI-Expanded)
- XII. **An Application for Process System Control**
ÜNAL M., AK A., TOPUZ V., ERDAL H.
OPTIMIZATION OF PID CONTROLLERS USING ANT COLONY AND GENETIC ALGORITHMS, cilt.449, ss.37-68, 2013 (SCI-Expanded)
- XIII. **Artificial Neural Networks**
ÜNAL M., AK A., TOPUZ V., ERDAL H.
OPTIMIZATION OF PID CONTROLLERS USING ANT COLONY AND GENETIC ALGORITHMS, cilt.449, ss.5-17, 2013 (SCI-Expanded)
- XIV. **Optimization of PID Controllers Using Ant Colony and Genetic Algorithms Conclusion**
ÜNAL M., AK A., TOPUZ V., ERDAL H.
OPTIMIZATION OF PID CONTROLLERS USING ANT COLONY AND GENETIC ALGORITHMS, cilt.449, ss.69-72, 2013 (SCI-Expanded)
- XV. **Trajectory tracking performance comparison between genetic algorithm and ant colony optimization for PID controller tuning on pressure process**
ÜNAL M., ERDAL H., TOPUZ V.
COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, cilt.20, sa.3, ss.518-528, 2012 (SCI-Expanded)
- XVI. **Trajectory Tracking Performance Comparison Between Genetic Algorithm and Ant Colony Optimization For PID Controller Tuning on Pressure Process**
ÜNAL M., ERDAL H., TOPUZ V.
Computer Applications in Engineering Education, cilt.1, ss.500-510, 2010 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

- I. **Determination of damage length in aluminum 2024 T-3 plate by lamb wave**

ÜNAL M.

PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, cilt.23, sa.4, ss.399-404, 2017 (ESCI)

II. Fault Diagnosis of Rolling Bearing Based on Feature Extraction and Neural Network Algorithm

Ünal M., Demetgül M., Onat M., Küçük H.

Recent Advances in Electrical Engineering Series, cilt.10, ss.179-185, 2013 (Hakemli Dergi)

Kitap & Kitap Bölümleri

I. Load Monitoring Using Surface Response to Excitation Method

Tashakori S., Baghalian A., ÜNAL M., ŞENYÜREK V. Y., Fekrmandi H., McDaniel D., Tansel İ. N.

Mechanics of Composite and Multi functional Materials Volume 7 Proceedings of the 2016 Annual Conference on Experimental and Applied Mechanics, Ralph, W. CarterSingh, RamanTandon, GyaneshwarThakre, Piyush R.Zavattieri, PabloZhu, Yong, Editör, Springer International Publishing, ss.209-214, 2017

II. Implementation of the Surface Response to Excitation Method for Pipes

Baghalian A., Tashakori S., Fekrmandi H., ÜNAL M., ŞENYÜREK V. Y., McDaniel D., Tansel İ. N.

Mechanics of Composite and Multi functional Materials Volume 7 Proceedings of the 2016 Annual Conference on Experimental and Applied Mechanics, Ralph, W. CarterSingh, RamanTandon, GyaneshwarThakre, Piyush R.Zavattieri, PabloZhu, Yong, Editör, Springer International Publishing, ss.261-266, 2017

III. Optimization of PID Controllers Using Ant Colony and Genetic Algorithms

Ünal M., Ak A., Topuz V., Erdal H.

Springer, London/Berlin , Dordrecht, 2013

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

I. Loose Bolt Detecting Sensorless SHM System

TANSEL İ. N., ŞENYÜREK V. Y., ÜNAL M., BAGHALIAN A., TASHAKORI S.

The 29'th Florida Conference on Recent Advances in Roboticsand Robot Showcase, MIAMI, Amerika Birleşik Devletleri, 12 - 13 Mayıs 2016, ss.258-261

II. Implementation of Heterodyne Effect in Structural Health Monitoring SHM Systems

TANSEL İ. N., ŞENYÜREK V. Y., ÜNAL M., BAGHALIAN A., TASHAKORI S.

The 29'th Florida Conference on Recent Advances in Roboticsand Robot Showcase, MIAMI, Amerika Birleşik Devletleri, 12 - 13 Mayıs 2016, ss.254-257

III. Loose Bolt Detection Using Smart Washers

TANSEL İ. N., ŞENYÜREK V. Y., ÜNAL M., AMIN B., SHERVIN T.

The 29'th Florida Conference on Recent Advances in Roboticsand Robot Showcase, MIAMI, Amerika Birleşik Devletleri, 12 - 13 Mayıs 2016, ss.220-224

IV. Faults Diagnosis of Bearing by Sound Analysis and Artificial Neural Networks

ÜNAL M., ONAT M., DEMETGÜL M., KÜÇÜK H.

7th International Advanced Technologies Symposium (IATS'13), 30 Eylül - 02 Ekim 2013, ss.705-710

V. Fault Diagnosis of Rolling Bearing Based on Feature Extraction and Neural Network Algorithm

ÜNAL M., DEMETGÜL M., ONAT M., KÜÇÜK H.

6th WSEAS International Conference on Sensors and Signals, 21 - 23 Mart 2013, cilt.169, ss.179-185

VI. Web Based Control Simulations Environment WBCSE for Control Education with MATLAB

ÜNAL M., SAVAŞ K., TOPUZ V., ERDAL H.

International Educational Technology Conference (IETC 2010), 01 Eylül 2010

VII. Genetic Optimized Wavelet Denoising for FOG Signals

ŞENYÜREK V. Y., ÜNAL M., VAROL H. S.

International Symposium on INnovations in Intelligent SysTems and Applications, 21 - 24 Haziran 2010, ss.436-440

- VIII. **Fault Diagnostics of a Small Scale Model of Industrial Temperature Control System**
DEMETGÜL M., ÜNAL M., ONAT M., Tansel I. N.
1 th International Symposium on Computing in Science & Engineering, 3 - 05 Haziran 2010
- IX. **Cellular Neural Network training by ant colony optimization algorithm**
ÜNAL M., ONAT M., BAL A.
2010 IEEE 18th Signal Processing and Communications Applications Conference, Diyarbakir, Turkey, Türkiye, 22 - 24 Nisan 2010
- X. **Reconstruction the complete image from random scattered pieces of image**
Kement C., KAZDAL F., Yanlik S., ÜNAL M., ONAT M.
2010 IEEE 18th Signal Processing and Communications Applications Conference, Diyarbakir, Turkey, 22 - 24 Nisan 2010
- XI. **ISAC Robot Kolunun Yörünge Takibi için PID Kontrolörün Genetik Algoritma İle Optimizasyonu**
ÜNAL M., ERDAL H., TOPUZ V., ERGÜZEL T. T.
Ulusal Teknik Eğitim ve Eğitim Bilimleri Genç Araştırmacılar Sempozyumu (UMES'07), Türkiye, 1 - 03 Haziran 2005

Metrikler

Yayın: 33

Atıf (WoS): 211

Atıf (Scopus): 272

H-İndeks (WoS): 8

H-İndeks (Scopus): 7

Akademi Dışı Deneyim

Florida International University, Mechanical and Material Engineering, Mechatronics Laboratory