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Education Information

Doctorate, Marmara University, Institute for Graduate Studies in Pure and Applied Sciences, Bilgisayar-Kontrol Eğitimi (YL) (Tezli), Turkey 2008 - 2014

Postgraduate, Marmara University, Institute for Graduate Studies in Pure and Applied Sciences, Elektronik Ve Bilgisayar Eğitimi (YL) (Tezli), Turkey 2005 - 2008

Undergraduate, Marmara University, Faculty of Technical Education, Electronic and Computer Education, Turkey 2001 - 2005

Dissertations

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

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

Academic Titles / Tasks

Assistant Professor, Marmara University, Faculty of Technology, Mechatronic Engineering, 2015 - Continues

Research Assistant, Marmara University, Faculty of Technical Education, Electronic and Computer Education, 2005 - Continues

Research Assistant, Marmara University, Faculty of Technology, Mechatronic Engineering, 2015 - 2015

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- 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.
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- II. **Implementation of heterodyning effect for monitoring the health of adhesively bonded and fastened composite joints**
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- III. **Fault Diagnosis of Rolling Bearings Using Data Mining Techniques and Boosting**
ÜNAL M., Sahin Y., ONAT M., Demetgul M., KÜÇÜK H.
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- 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.

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- V. **A novel approach for classification of loads on plate structures using artificial neural networks**
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- VI. **Fault diagnosis of rolling bearings using a genetic algorithm optimized neural network**
ÜNAL M., ONAT M., Demetgul M., KÜÇÜK H.
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- VII. **Use of Artificial Neural Networks for Modelling of Seam Strength and Elongation at Break**
YILDIZ Z., Dal V., ÜNAL M., YILDIZ K.
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- 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.
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- IX. **Genetic Algorithm**
ÜNAL M., AK A., TOPUZ V., ERDAL H.
OPTIMIZATION OF PID CONTROLLERS USING ANT COLONY AND GENETIC ALGORITHMS, vol.449, pp.19-29, 2013 (Journal Indexed in SCI)
- X. **Optimization of PID Controllers Using Ant Colony and Genetic Algorithms Introduction**
ÜNAL M., AK A., TOPUZ V., ERDAL H.
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- XI. **Ant Colony Optimization (ACO)**
ÜNAL M., AK A., TOPUZ V., ERDAL H.
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- XII. **An Application for Process System Control**
ÜNAL M., AK A., TOPUZ V., ERDAL H.
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- XIII. **Artificial Neural Networks**
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ÜNAL M., AK A., TOPUZ V., ERDAL H.
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- XV. **Trajectory tracking performance comparison between genetic algorithm and ant colony optimization for PID controller tuning on pressure process**
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- XVI. **Trajectory Tracking Performance Comparision 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, vol.1, pp.500-510, 2010 (Journal Indexed in SCI Expanded)

Articles Published in Other Journals

- 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, vol.23, no.4, pp.399-404, 2017 (Journal Indexed in 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, vol.10, 2013 (Refereed Journals of Other Institutions)

Books & Book Chapters

- I. **Load Monitoring Using Surface Response to Excitation Method**
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- II. **Implementation of the Surface Response to Excitation Method for Pipes**
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- III. **Optimization of PID Controllers Using Ant Colony and Genetic Algorithms**
Ünal M., Ak A., Topuz V., Erdal H.
Springer, London/Berlin , Dordrecht, 2013

Refereed Congress / Symposium Publications in Proceedings

- I. **Implementation of Heterodyne Effect in Structural Health Monitoring SHM Systems**
TANSEL I. N. , ŞENYÜREK V. Y. , ÜNAL M., BAGHALIAN A., TASHAKORI S.
The 29'th Florida Conference on Recent Advances in Roboticsand Robot Showcase, MIAMI, United States Of America, 12 - 13 May 2016, pp.254-257
- II. **Loose Bolt Detecting Sensorless SHM System**
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- III. **Loose Bolt Detection Using Smart Washers**
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- IV. **Faults Diagnosis of Bearing by Sound Analysis and Artificial Neural Networks**
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- 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 March 2013, vol.169, pp.179-185
- VI. **Web Based Control Simulations Environment WBCSE for Control Education with MATLAB**
ÜNAL M., SAVAŞ K., TOPUZ V., ERDAL H.
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- 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 June 2010, pp.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 June 2010
- IX. **Cellular Neural Network training by ant colony optimization algorithm**
ÜNAL M., ONAT M., BAL A.
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- 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 April 2010
- XI. **ISAC Robot Kolunun Yörünge Takibi İçin PID Kontrolörün Genetik Algoritma ile Optimizasyonu**
ÜNAL M., ERDAL H., TOPUZ V., ERGÜZEL T. T.
UMES'07 - Ulusal Teknik Eğitim, Mühendislik ve Eğitim Bilimleri Genç Araştırmacılar Sempozyumu, Kocaeli, Turkey, 20 June 2007, pp.404-407
- XII. **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), Turkey, 1 - 03 June 2005

Citations

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