

Prof. MURAT CANER TESTİK

Personal Information

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Education Information

Doctorate, Arizona State University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, United States Of America 1999 - 2003

Foreign Languages

English, C1 Advanced

Research Areas

Industrial Engineering , Quality and Reliability, Quality Control, Engineering and Technology

Academic Titles / Tasks

Professor, Hacettepe Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2012 - Continues
Associate Professor, Hacettepe Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2005 - 2012
Assistant Professor, Hacettepe Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2005 - 2005

Academic and Administrative Experience

Hacettepe Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2016 - Continues
Hacettepe Üniversitesi, Mühendislik Fakültesi, 2012 - 2016
Hacettepe Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2006 - 2014

Advising Theses

TESTİK M. C. , BİLGİSAYAR VERİ GÜNLÜKLERİ ÜZERİNE HTEA OTOMASYONU VE ALTERNATİF YÖNTEMLER İLE ÇÖZÜM YAKLAŞIMLARI, Postgraduate, H.İBRAHİM(Student), 2018
TESTİK M. C. , Esnek üretim sistemlerinin süreç tabanlı petri ağları ile modellenmesi, Postgraduate, A.KOÇ(Student), 2017
TESTİK M. C. , Parameter estimators in Phase I and performance of individuals chart, Postgraduate, M.ATALAY(Student), 2016
TESTİK M. C. , Phase I analysis of variables type correlated data, Postgraduate, E.DAŞDEMİR(Student), 2015
TESTİK M. C. , Sürekli üretim yapan sistemler için performans yönetim sistemi tasarımı, Doctorate, V.SÖNMEZ(Student), 2015
TESTİK M. C. , A two-sided CUSUM for first-order integer-valued autoregressive processes of poisson counts, Postgraduate, P.YONTAY(Student), 2011
TESTİK M. C. , An improved organization method for association rules and a basis for comparison of methods,

Postgraduate, M.JABARNEJAD(Student), 2010

TESTİK M. C. , Monitoring high quality processes: A study of estimation errors on the time-between-events exponentially weighted moving average schemes, Postgraduate, G.ÖZSAN(Student), 2008

TESTİK M. C. , Controlling high quality manufacturing processes: A robustness study of the lower-sided TBE EWMA procedure, Postgraduate, C.PEHLİVAN(Student), 2008

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

- I. **Change points of real GDP per capita time series corresponding to the periods of industrial revolutions**
TESTİK M. C. , Sarikulak O.
TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE, vol.170, 2021 (Journal Indexed in SSCI)
- II. **On the design of Shewhart control charts for count time series under estimation uncertainty**
Weiss C. H. , TESTİK M. C. , Homburg A.
COMPUTERS & INDUSTRIAL ENGINEERING, vol.157, 2021 (Journal Indexed in SCI)
- III. **Assessment of OTT Pluvio(2) Rain Intensity Measurements**
Saha R., Testik F. Y. , TESTİK M. C.
JOURNAL OF ATMOSPHERIC AND OCEANIC TECHNOLOGY, vol.38, no.4, pp.897-908, 2021 (Journal Indexed in SCI)
- IV. **Discussion on "Experiences with big data: Accounts from a data scientist's perspective"**
TESTİK M. C.
QUALITY ENGINEERING, vol.32, no.4, pp.553-555, 2020 (Journal Indexed in SCI)
- V. **An algorithmic approach to outlier detection and parameter estimation in Phase I for designing Phase II EWMA control chart**
TESTİK M. C. , Kara O., Knoth S.
COMPUTERS & INDUSTRIAL ENGINEERING, vol.144, 2020 (Journal Indexed in SCI)
- VI. **Guidelines for automating Phase I of control charts by considering effects on Phase-II performance of individuals control chart**
Atalay M., TESTİK M. C. , DURAN S., Weiss C. H.
QUALITY ENGINEERING, vol.32, no.2, pp.223-243, 2020 (Journal Indexed in SCI)
- VII. **Risk-based metrics for performance evaluation of control charts**
Weiss C. H. , TESTİK M. C.
QUALITY AND RELIABILITY ENGINEERING INTERNATIONAL, vol.35, no.1, pp.280-291, 2019 (Journal Indexed in SCI)
- VIII. **Guaranteed conditional ARL performance in the presence of autocorrelation**
Weiss C. H. , Steuer D., Jentsch C., TESTİK M. C.
COMPUTATIONAL STATISTICS & DATA ANALYSIS, vol.128, pp.367-379, 2018 (Journal Indexed in SCI)
- IX. **Effectiveness of phase I applications for identifying randomly scattered out-of-control observations and estimating control chart parameters**
TESTİK M. C. , Weiss C. H. , KOCA Y., TESTİK M. C.
QUALITY AND RELIABILITY ENGINEERING INTERNATIONAL, vol.34, no.1, pp.78-92, 2018 (Journal Indexed in SCI)
- X. **Editor's note**
TESTİK M. C.
QUALITY ENGINEERING, vol.30, no.4, pp.545, 2018 (Journal Indexed in SCI)
- XI. **Overall equipment effectiveness when production speeds and stoppage durations are uncertain**
SÖNMEZ V., TESTİK M. C. , TESTİK Ö. M.
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, pp.1-10, 2017 (Journal Indexed in SCI Expanded)
- XII. **Using accurately measured production amounts to obtain calibration curve corrections of production line speed and stoppage duration consisting of measurement errors**
SÖNMEZ V., TESTİK M. C.

INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.88, pp.3257-3263, 2017 (Journal Indexed in SCI)

- XIII. **Evaluation of Phase I analysis scenarios on Phase II performance of control charts for autocorrelated observations**
DAŞDEMİR E., WEISS C., TESTİK M. C. , KNOTH S.
QUALITY ENGINEERING, vol.28, no.3, pp.293-304, 2016 (Journal Indexed in SCI)
- XIV. **Special Issue: Special Issue on the Third Stu Hunter Research Conference**
TESTİK M. C.
QUALITY ENGINEERING, vol.28, no.1, pp.1, 2016 (Journal Indexed in SCI)
- XV. **On the Phase I analysis for monitoring time-dependent count processes**
WEISS C. H. , TESTİK M. C.
IIE TRANSACTIONS, vol.47, no.3, pp.294-306, 2015 (Journal Indexed in SCI)
- XVI. **Residuals-Based CUSUM Charts for Poisson INAR(1) Processes**
WEISS C. H. , TESTİK M. C.
JOURNAL OF QUALITY TECHNOLOGY, vol.47, no.1, pp.30-42, 2015 (Journal Indexed in SCI)
- XVII. **A Two-Sided Cumulative Sum Chart for First-Order Integer-Valued Autoregressive Processes of Poisson Counts**
Yontay P., WEISS C. H. , TESTİK M. C. , BAYINDIR Z. P.
QUALITY AND RELIABILITY ENGINEERING INTERNATIONAL, vol.29, no.1, pp.33-42, 2013 (Journal Indexed in SCI)
- XVIII. **Driver performance appraisal using GPS terminal measurements: A conceptual framework**
Simsek B., Pakdil F., Dengiz B., TESTİK M. C.
TRANSPORTATION RESEARCH PART C-EMERGING TECHNOLOGIES, vol.26, pp.49-60, 2013 (Journal Indexed in SCI)
- XIX. **Detection of Abrupt Changes in Count Data Time Series: Cumulative Sum Derivations for INARCH(1) Models**
WEISS C. H. , TESTİK M. C.
JOURNAL OF QUALITY TECHNOLOGY, vol.44, no.3, pp.249-264, 2012 (Journal Indexed in SCI)
- XX. **Discovering Blood Donor Arrival Patterns Using Data Mining: A Method to Investigate Service Quality at Blood Centers**
TESTİK M. C. , OZKAYA B. Y. , AKSU S., ÖZCEBE O. İ.
JOURNAL OF MEDICAL SYSTEMS, vol.36, no.2, pp.579-594, 2012 (Journal Indexed in SCI)
- XXI. **A review of data mining applications for quality improvement in manufacturing industry**
KÖKSAL G., BATMAZ İ., TESTİK M. C.
EXPERT SYSTEMS WITH APPLICATIONS, vol.38, no.10, pp.13448-13467, 2011 (Journal Indexed in SCI)
- XXII. **Monitoring chenille yarn defects using image processing with control charts**
TUNAK M., BAJZIK V., TESTİK M. C.
TEXTILE RESEARCH JOURNAL, vol.81, no.13, pp.1344-1353, 2011 (Journal Indexed in SCI)
- XXIII. **The Poisson INAR(1) CUSUM chart under overdispersion and estimation error**
WEISS C. H. , TESTİK M. C.
IIE TRANSACTIONS, vol.43, no.11, pp.805-818, 2011 (Journal Indexed in SCI)
- XXIV. **On the Expected Parts Per Million Nonconforming Levels Obtained from Estimated Process Capability Indices**
OZKAYA B. Y. , TESTİK M. C.
QUALITY AND RELIABILITY ENGINEERING INTERNATIONAL, vol.26, no.8, pp.817-829, 2010 (Journal Indexed in SCI)
- XXV. **Properties of the Exponential EWMA Chart with Parameter Estimation**
Ozsan G., TESTİK M. C. , WEISS C. H.
QUALITY AND RELIABILITY ENGINEERING INTERNATIONAL, vol.26, no.6, pp.555-569, 2010 (Journal Indexed in SCI)
- XXVI. **Editorial - ENBIS 8th Annual Meeting**
TESTİK M. C.

- QUALITY AND RELIABILITY ENGINEERING INTERNATIONAL, vol.26, no.2, pp.125, 2010 (Journal Indexed in SCI)
- XXVII. **Impact of Model Misspecification on the Exponential EWMA Charts: A Robustness Study when the Time-Between-Events are not Exponential**
PEHLIVAN C., TESTİK M. C.
QUALITY AND RELIABILITY ENGINEERING INTERNATIONAL, vol.26, no.2, pp.177-190, 2010 (Journal Indexed in SCI)
- XXVIII. **CUSUM Monitoring of First-Order Integer-Valued Autoregressive Processes of Poisson Counts**
WEISS C. H. , TESTİK M. C.
JOURNAL OF QUALITY TECHNOLOGY, vol.41, no.4, pp.389-400, 2009 (Journal Indexed in SCI)
- XXIX. **The effect of Phase I sample size on the run length performance of control charts for autocorrelated data**
KÖKSAL G., Kantar B., Ula T. A. , TESTİK M. C.
JOURNAL OF APPLIED STATISTICS, vol.35, no.1, pp.67-87, 2008 (Journal Indexed in SCI)
- XXX. **Conditional and marginal performance of the Poisson CUSUM control chart with parameter estimation**
Testik M. C.
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.45, no.23, pp.5621-5638, 2007 (Journal Indexed in SCI)
- XXXI. **Relationships among control charts used with feedback control**
RUNGER G., Testik M. C. , TSUNG F.
QUALITY AND RELIABILITY ENGINEERING INTERNATIONAL, vol.22, no.8, pp.877-887, 2006 (Journal Indexed in SCI)
- XXXII. **Multivariate one-sided control charts**
Testik M. C. , RUNGER G.
IIE TRANSACTIONS, vol.38, no.8, pp.635-645, 2006 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Sürekli Üretim Hatlarında Kullanılan Makinelerin Performanslarının İzlenmesi Amacıyla Geliştirilen Bir Bilgi Sistemi Çerçevesi**
SÖNMEZ V., TESTİK M. C.
Savunma Bilimleri Dergisi, vol.14, no.2, pp.111-140, 2015 (Other Refereed National Journals)

Books & Book Chapters

- I. **Assessment of Shewhart Control Chart Limits in Phase I Implementations Under Various Shift and Contamination Scenarios**
TESTİK M. C. , Weiss C., KOCA Y., TESTİK Ö. M.
in: Frontiers in Statistical Quality Control 12, , Editor, Springer, Cham, pp.21-43, 2018
- II. **GERİATRİK BİLİMLER**
BAYDAR T., KUTSAL F. Y. , İnam A., SAYIL F. M. , ERDİL F., RAKICIOĞLU N., ASLAN D., BARAN A., BABAOĞUL M., TESTİK M. C. , et al.
Yalçın Matbaacılık A.Ş., Ankara, 2015

Refereed Congress / Symposium Publications in Proceedings

- I. **A Multiobjective Evolutionary Approach to Employee Bus Transportation Problem**
DAŞDEMİR E., TESTİK M. C. , TESTİK Ö. M. , TUNCER ŞAKAR C.

International Conference on Advanced Technologies, Computer Engineering and Science (ICATCES 2018), Karabük, Turkey, 11 - 13 May 2018

- II. **A Database Design for a Process Mapping Tool: RASCI**
SÖNMEZ V., TESTİK M. C.
1st International Advanced Research and Engineering Congress, 16 - 18 November 2017
- III. **A Framework for Designing a Performance Measurement System that Measures and Monitors Overall Equipment Effectiveness**
SÖNMEZ V., TESTİK M. C.
2nd International Mediterranean Science and Engineering Congress, 25 - 27 October 2017
- IV. **Simulation of Out-of-Control Process Observations for Evaluating Effectiveness of Phase I Studies**
TESTİK M. C., Weiss C., KOCA Y., TESTİK Ö. M.
INFORMS Annual Meeting, HOUSTON, United States Of America, 22 - 25 October 2017
- V. **A Tool for Calculating Fuzzy and Interval Production Loss Measurement**
SÖNMEZ V., TESTİK M. C., TESTİK Ö. M.
The 5th International Fuzzy Systems Symposium, 14 - 15 October 2017
- VI. **Phase I Performance of Control Charts under Temporally Random Contamination of Observations**
TESTİK M. C., Weiss C., KOCA Y., TESTİK Ö. M.
ENBIS European Network for Business and Industrial Statistics) 17, Napoli, Italy, 9 - 14 September 2017
- VII. **Sürekli Üretim Sistemlerinde Kullanılan Makineler için Gerçekleşen Üretim Hızı ve Toplam Üretim Kesinti Süresinin Hesaplanmasında Kalibrasyon Yaklaşımı**
SÖNMEZ V., TESTİK M. C.
37. Yöneylem Araştırması ve Endüstri Mühendisliği Ulusal Kongresi, Turkey, 5 - 07 July 2017
- VIII. **Automation of FMEA for Computer Servers Using Log Data with Grey Relational Analysis**
AYAZ H. İ., TESTİK M. C.
2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, 5 - 08 October 2017, pp.616-620
- IX. **Yazılım Geliştirme Takımlarının Bulut Üstünden Yazılım Geliştirme Eğilimlerinin İncelenmesi**
Çoban Ş., UÇAR E., CHOUSEIN OĞLOU O., SEVGİ C., TESTİK M. C.
10. Ulusal Yazılım Mühendisliği Sempozyumu (UYMS16), Çanakkale, Turkey, 24 - 26 October 2016, pp.14-25
- X. **On the Phase I Shewhart Control Charts for Minizing Mean Squared Error When the Data are Contaminated**
TESTİK M. C., weiss c., KOCA Y., TESTİK Ö. M.
XIIth International Workshop on Intelligent Statistical Quality Control 2016, 16 August 2016
- XI. **İş Pozisyonlarının Görev Analizi için Görev Yönetim Matrisi**
SÖNMEZ V., TESTİK M. C.
Yöneylem Araştırması ve Endüstri Mühendisliği 36. Ulusal Kongresi, Turkey, 13 - 15 July 2016
- XII. **Design of an Information System for Analyzing the Performance of Continuous Production Systems**
SÖNMEZ V., TESTİK M. C.
28th European Conference on Operational Research, 3 - 06 July 2016
- XIII. **Understanding the tendency of software development teams to develop software over the cloud**
Yazılım geliştirme takımlarının bulut üstünden yazılım geliştirme eğilimlerinin incelenmesi
Çoban Ş., Uçar E., CHOUSEİNOĞLOU O., Sevgi C., TESTİK M. C.
10th Turkish National Software Engineering Symposium, UYMS 2016, Çanakkale, Turkey, 24 - 26 October 2016, vol.1721, pp.14-25
- XIV. **Sürekli Üretim Hatlarında Kullanılan Makineler için Toplam Üretim Duruşu Süresinin Bileşik Poisson Dağılımı ile Modellenmesi ve İzlenmesi**
SÖNMEZ V., TESTİK M. C.
Yöneylem Araştırması ve Endüstri Mühendisliği 35. Ulusal Kongresi, Turkey, 9 - 11 September 2015
- XV. **Phase I Analysis of Autocorrelated Time Series Data**
DAŞDEMİR E., WEISS C., TESTİK M. C., KNOTH S.
European Network for Business and Industrial Statistics (ENBIS) 14 Conference, Linz, Austria, 21 - 25 September

2014

- XVI. **A Simulation Based Decision Support Tool For Hospital Bed Capacity Planning**
SÖNMEZ V., DAŞDEMİR E., TESTİK Ö. M. , TESTİK M. C.
Global Conference on Healthcare Systems Engineering, 4 - 07 July 2014
- XVII. **Hacettepe Üniversitesi Tıp Fakültesi İhsan Doğramacı Çocuk Hastanesi Çocuk Acil Ünitesi'nde Triaaj Uygulama Tecrübesi ve Triaaj Performans Analizi**
TEKŞAM Ö., TESTİK M. C. , ÖZÖN Z. A. , SÖNMEZ V., pehlivan C., KALE G., BODUROĞLU O. K.
II. Uluslararası Sağlıkta Performans ve Kalite Kongresi, Antalya, Turkey, 28 April 2010, pp.255-262
- XVIII. **Gün İçi Kan Bağış Sayılarının Homojen Olmayan Bileşik Poisson Süreci Olarak Modellenmesi**
SÖNMEZ V., TESTİK M. C. , YÜKSEL ÖZKAYA B.
Yöneylem Araştırması Endüstri Mühendisliği Sempozyumu, Turkey, 07 July 2009 - 08 July 2007
- XIX. **Kan Merkezi Hizmet Kalitesinin İyileştirilmesine Yönelik Bir Simülasyon Çalışması**
SÖNMEZ V., TESTİK M. C. , YÜKSEL ÖZKAYA B.
Yöneylem Araştırması Endüstri Mühendisliği Sempozyumu, Turkey, 7 - 08 July 2008
- XX. **Business descriptions and financial performance analysis of public RFID companies**
Kasap S., TESTİK M. C. , KASAP N.
1st International RFID Eurasia Conference, İstanbul, Turkey, 5 - 06 September 2007, pp.238-240

Supported Projects

- SÖNMEZ V., TESTİK M. C. , Project Supported by Higher Education Institutions, Sürekli Üretim Sistemlerinde Kullanılan Makineler için Gerçekleşen Üretim Hızı ve Toplam Üretim Kesinti Süresinin Hesaplanmasında Kalibrasyon Yaklaşımı, 2017 - 2017
- CHOUSEİN OĞLOU O., TESTİK M. C. , Project Supported by Higher Education Institutions, Yazılım Geliştirme Takımlarının Bulut Üstünden Yazılım Geliştirme Eğilimlerinin İncelenmesi, 2016 - 2017
- TESTİK M. C. , Project Supported by Higher Education Institutions, POISON INAR1 Süreçleri için Rezidüye Dayalı CUSUM Grafikleri, 2016 - 2017

Citations

Total Citations (WOS):435

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