

# Assoc. Prof. Senem Kurşun Bahadır

## Personal Information

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## Education Information

2009 - 2011	Doctorate, Université des Sciences et Technologie de Lille: Lille I, Automatique, Génie Informatique, Traitement Du Signal Et Des Images, Bilgisayar Mühendisliği (DR), France
2007 - 2011	Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Textile Engineering (PhD), Turkey
2005 - 2007	Post Graduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, INDUSTRIAL ENGINEERING (MSc), Turkey
2001 - 2005	Under Graduate, Istanbul Technical University, Makina, TEXTILE ENGINEERING, Turkey

## Foreign Languages

English

## Dissertations

2011	Wearable Obstacle Detection System Fully Integrated To Textile Structures For Visually Impaired People, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Tekstil Mühendisliği (Dr), Doctorate
2011	Wearable Obstacle Avoidance System Integrated with Conductive Yarns For Visually Impaired People, Université des Sciences et Technologie de Lille: Lille I, Automatique, Génie Informatique, Traitement Du Signal Et Des Images, Doctorate
2007	Tekstil Endüstrisinde Benzetim Tekniği İle Üretim Hattı Modellemesi Ve Uygun İş Akış Stratejisinin Belirlenmesi, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği Anabilim Dalı, Post Graduate

## Research Areas

Control and System Engineering, Computer Sciences, algorithms, Simulation and Modelling, System Dynamics and Control, Textile Engineering and Technology, Engineering and Technology

## Academic Titles / Tasks

2019 - Continues	Associate Professor, Istanbul Technical University, Makina, Makina Mühendisliği
2016 - 2019	Associate Professor, Istanbul Technical University, Tekstil Teknolojileri Ve Tasarımı, Tekstil Mühendisliği
2012 - 2016	Assistant Professor, İstanbul Teknik Üniversitesi, Tekstil Teknolojileri Ve Tasarımı Fakültesi, Tekstil Mühendisliği Bölümü
2005 - 2012	Research Assistant, İstanbul Teknik Üniversitesi, Tekstil Teknolojileri Ve Tasarımı Fakültesi, Tekstil Mühendisliği Bölümü

## Professional Experience

2016 - 2016	Vice Dean, Istanbul Technical University, Tekstil Teknolojileri Ve Tasarımı
2015 - 2016	Deputy Head of Department, İstanbul Teknik Üniversitesi, Tekstil Mühendisliği, Tekstil Mühendisliği

## Courses

2018 - 2019	Introduction to Smart Textiles and Wearable Technologies, Under Graduate
2018 - 2019, 2019 - 2020	E-Textiles & Wearable Computing System, Post Graduate
2012 - 2013, 2014 - 2015, 2015 - 2016	Clothing Technology, Under Graduate

## Designed Lessons

2018 - 2019	Kurşun Bahadır S., Introduction to Smart Textiles and Wearable Technologies, Under Graduate
2018 - 2019	Kurşun Bahadır S., E-Textiles & Wearable Computing System, Post Graduate

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

- I. **Development of textile-based transmission lines using conductive yarns and ultrasonic welding technology for e-textile applications**  
Atalay Ö., Kalaoğlu F., Kurşun Bahadır S.  
JOURNAL OF ENGINEERED FIBERS AND FABRICS, vol.14, 2019 (Journal Indexed in SCI)
- II. **Measured Current Characteristics of Powered E-Textile Transmission Lines with Respect to Welding Process Parameters**  
Kurşun Bahadır S., Şahin U. K.  
TEKSTİL VE KONFEKSİYON, vol.29, pp.97-104, 2019 (Journal Indexed in SCI)
- III. **The effects of finishing processes on the dynamic drape of wool fabrics**  
Eryürük S. H. , Kurşun Bahadır S., Sarıçam C., Kalaoğlu F.  
INTERNATIONAL JOURNAL OF CLOTHING SCIENCE AND TECHNOLOGY, vol.31, pp.195-206, 2019 (Journal Indexed in SCI)
- IV. **Optimization of hot air welding process parameters for manufacturing textile transmission lines for e-textiles applications: Part I: Electro-conductive properties**  
Bahadır S., JEVSNIK S.  
TEXTILE RESEARCH JOURNAL, vol.87, pp.232-243, 2017 (Journal Indexed in SCI)
- V. **Color and electrical resistance evaluation of cotton fabrics composed of stainless steel yarns treated with direct and reactive dyes**  
Bahadır S., JEVSNIK S., FAKIN D., SAHIN U. K.  
TEXTILE RESEARCH JOURNAL, vol.86, pp.1356-1371, 2016 (Journal Indexed in SCI)
- VI. **Decision of sensor location and best classification method for entrail and muscle disease detection in healthcare smart clothing based on acceleration measurements**  
Bahadır S.  
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.37, pp.999-1008, 2015 (Journal Indexed in SCI)
- VII. **The Use of Hot Air Welding Technologies for Manufacturing E-textile Trasmision Lines**  
Bahadır S., KALAOGLU F., JEVSNIK S.  
FIBERS AND POLYMERS, vol.16, pp.1384-1394, 2015 (Journal Indexed in SCI)
- VIII. **Use of Artificial Neural Networks for Modelling the Drape Behaviour of Woollen Fabrics Treated**

**with Dry Finishing Processes**

Kurşun Bahadır S., Kalaoğlu F., Jeysnik S., Eryürük S. H. , Sarıçam C.

FIBRES & TEXTILES IN EASTERN EUROPE, vol.23, pp.90-99, 2015 (Journal Indexed in SCI)

- IX. **Use of artificial Neural Networks for Modelling the Drape Behaviour of woollen Fabrics Treated with Dry Finishing Processes**  
KURŞUN BAHADIR S., Kalaoğlu F., simona J., ERYÜRÜK S. H. , SARIÇAM C.  
FIBRES & TEXTILES IN EASTERN EUROPE, vol.23, pp.1230-3666, 2015 (Journal Indexed in SCI Expanded)
- X. **The Effect of Textile Pretreatment Processes on Signal Transferring Capability of Textile Transmission Lines**  
Kurşun Bahadır S.  
FIBRES & TEXTILES IN EASTERN EUROPE, vol.23, pp.55-62, 2015 (Journal Indexed in SCI Expanded)
- XI. **Selection of appropriate e textile structure manufacturing process prior to sensor integration using AHP**  
Bahadır M. Ç. , Kurşun Bahadır S.  
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.76, pp.1719-1730, 2015 (Journal Indexed in SCI Expanded)
- XII. **Use of artificial neural networks for modelling the drape behaviour of woollen fabrics treated with dry finishing processes Zastosowanie sztucznych sieci neuronowych dla modelowania układalności wełnianych tkanin poddanych procesom suchego wykańczania**  
Kurşun Bahadır S., Kalaoğlu F., JEVSNIK S., Hanife Eryuruk S., Sarıçam C.  
Fibres and Textiles in Eastern Europe, vol.23, pp.90-99, 2015 (Journal Indexed in SCI Expanded)
- XIII. **Analysing the effect of decatizing on the frictional properties of wool fabrics**  
ERYÜRÜK S. H. , Kalaoğlu F., KURŞUN BAHADIR S., Simona J.  
FIBRES & TEXTILES IN EASTERN EUROPE, vol.22, pp.79-83, 2014 (Journal Indexed in SCI Expanded)
- XIV. **An algorithm based on neuro fuzzy controller implemented in a smart clothing system for obstacle avoidance**  
Kurşun Bahadır S., Koncar V., Kalaoğlu F.  
International Journal of Computational Intelligence Systems, vol.6, pp.503-517, 2013 (Journal Indexed in SCI Expanded)
- XV. **Analysis of Vibrotactile Perception via e Textile Structure Using Fuzzy Logic**  
Kurşun Bahadır S., Kalaoğlu F., Koncar V.  
Fibres & Textiles in Eastern Europe, vol.20, pp.91-97, 2012 (Journal Indexed in SCI Expanded)
- XVI. **Crosstalk Effect In A Fabric Circuit Developed For Multi Connection Of Sonar Sensors**  
Kurşun Bahadır S., Kalaoğlu F., Koncar V.  
Tekstil ve Konfeksiyon, vol.22, pp.197-202, 2012 (Journal Indexed in SCI Expanded)
- XVII. **Assessing the Signal Quality of an Ultrasonic Sensor on Different Conductive Yarns Used as Transmission Lines**  
Kurşun Bahadır S., Koncar V., Kalaoğlu F., Cristian I., Thomassey S.  
FIBRES & TEXTILES IN EASTERN EUROPE, vol.19, pp.75-81, 2011 (Journal Indexed in SCI)
- XVIII. **A Study on The Beam Pattern of Ultrasonic Sensor Integrated to Textile Structure**  
Kurşun Bahadır S., Kalaoğlu F., Koncar V.  
International Journal of Clothing Science and Technology, vol.23, pp.232-241, 2011 (Journal Indexed in SCI Expanded)
- XIX. **Assessing the signal quality of an ultrasonic sensor on different conductive yarns used as transmisson lines**  
KURŞUN BAHADIR S., Vladan K., Kalaoğlu F.  
FIBRES & TEXTILES IN EASTERN EUROPE, vol.19, pp.75-81, 2011 (Journal Indexed in SCI Expanded)
- XX. **LINE BALANCING BY SIMULATION IN A SEWING LINE**  
Kurşun Bahadır S., Kalaoğlu F.  
TEKSTİL VE KONFEKSİYON, vol.20, pp.257-261, 2010 (Journal Indexed in SCI)
- XXI. **Dikim Bandında Simulasyonla Bant Dengeleme**

Kurşun Bahadır S., KALAOĞLU F.

Tekstil ve Konfeksiyon, vol.20, pp.257-261, 2010 (Journal Indexed in SCI Expanded)

XXII. **Production line modelling in clothing industry by simulation**

Kurşun Bahadır S., Dincmen M., Kalaoğlu F.

TEKSTİL, vol.58, pp.186-195, 2009 (Journal Indexed in SCI)

XXIII. **Simulation of Production line balancing in apparel manufacturing**

KURŞUN BAHADIR S., Kalaoğlu F.

Fibers and textiles in eastern Europe, vol.17, pp.68-71, 2009 (Journal Indexed in SCI Expanded)

## Articles Published in Other Journals

I. **Investigation of Heating Behaviour of E-textile Structures**

Sezgin H., Kurşun Bahadır S., Böke Y. E. , Kalaoğlu F.

International Journal of Environmental, Chemical, Ecological, Geological and Geophysical Engineering, vol.9, pp.474-477, 2015 (Refereed Journals of Other Institutions)

II. **THE EVALUATION OF STIFFNESS AND DRAPE BEHAVIOUR OF WOOL FABRICS**

Eryürük S. H. , Kalaoğlu F., Kurşun Bahadır S., Sarıçam C., Jevsnik S.

Tekstil ve Mühendis, vol.22, pp.24-32, 2015 (Other Refereed National Journals)

## Supported Projects

2018 - 2019	Giyilebilir elektronik uygulamalarına yönelik yüksek sıcaklıklara dayanıklı veri iletim kalitesi yüksek e-tekstil yapılarının geliştirilmesi, Project Supported by Higher Education Institutions
2015 - 2018	KAYNAK DİKİŞ YAPILMIŞ ÖRME E-KUMAŞLARIN ELEKTRİKSEL ISITMA PERFORMANSLARININ DEĞERLENDİRİLMESİ, Project Supported by Higher Education Institutions
2012 - 2018	Yapay Sinir Ağlarında Yararlanılarak Akıllı Tekstil Yapısı ile Cisim Konumu Testpiti, Project Supported by Higher Education Institutions
2012 - 2015	Tekstil Önterbiye ve Boyama İşlemlerinin İletken İpliklerle Oluşturulmuş E-Tekstil Yapılarına Etkisi, Project Supported by Higher Education Institutions

## Activities in Scientific Journals

2016 - Continues	Journal of Fiber Bioengineering and Informatics, Editor
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## Scientific Consultations

2016 - Continues	Project Consultancy, ASELSAN
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## Citations

- I. Total Citations (WOS): 50
- II. h-index (WOS): 5