

SENEK KURŞUN BAHADIR

Asst. Prof. Dr.
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COMMUNICATION

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PERSONALITY

Nationality	Turkish (Turkey)
Date of Birth	09.01.1984
Birth Place	Bergama/İZMİR

EDUCATION

Degree	Department	University	Year
Ph.D	Automatique/Génie Informatique	L'USTL-France	09/2009-11/2011
Ph.D	Textile Engineering	Istanbul Technical University	09/2007-09/2011
MSc.	Industrial Engineering	Istanbul Technical University	09/2005-06/2007
BSc.	Textile Engineering	Istanbul Technical University	09/2001-06/2005

AWARDS

2011	System (Platform for Smart Textiles and Wearable Microsystems) Student Award 2011 (1st prize) Belgium-USA
2011	Théophile Legrand International Award For Textile Innovation 2011 (2 nd prize) Institut de France
2011	TMMOB Makina Mühendisleri Odası-V. Necdet Erarslan Proje Yarışması 2011 –Turkey (2 nd prize)

EXPERIENCE

Date	Position	Work place	Country
26.03.2015-*	Vice Head of Department	Istanbul Technical University	TURKEY
20.03.2012-*	Assist. Prof. Dr.	Istanbul Technical University	TURKEY
02.12.2005-2012	Research Assist.	Istanbul Technical University	
10.2009-04.2010	Researcher	ENSAIT-GEMTEX	FRANCE
09.2010-07.2011	Researcher	ENSAIT-GEMTEX	FRANCE

PROJECTS

International Projects

- Welding of E-Textiles for Interactive Clothing (ETexWeld)- EU/ H2020-MSCA-RISE/ 644268/ **Vice Coordinator** /2015-2019*
- The modeling and simulation of e-textile transmission lines manufactured by hot-air welding technology, TUBITAK 2221 - Coordinator/ 2014-2015/ (Slovenia-Turkey).
- Wearable Obstacle Detection System/GEMTEX/ **Researcher**/ 2009-2011 (France-Turkey).
- Textile Based Ultrasonic Sensor /ENSAIT-GEMTEX/ **Researcher** /2010-2011 (France).
- The Effects of Finishing Processes on the Behavior of Woolen Fabrics, Project no:107M228, TUBİTAK **Researcher** / 2008-2011, Slovenia-Turkey

National Projects

- Design of e-textile based thermal heating panels via welding technology, 0034.TGSD.2015-2, Ministry of Science, Industry and Technoogy, **Coordinator**, 29.09.2015-28.09.2016*
- Design of e-textile transmission lines via welded seam technology and optimization of welded seam process parameters for production of e-textile transmission lines, TUBİTAK 214M405, **Coordinator**, 2015-2016*
- The Effect of Textile Pre-Treatment and Dyeing Processes on E-Textile Structures Formed By Conductive Yarns, İTÜ BAP 36120, **Coordinator**, 2012-2015.
- Textile Design Center for Disabled People, İSTKA,TR10/14/GEN/0124, **Researcher**, 2014-2015
- Smart Clothing Design for Visually Impaired People, İTÜ BAP 33738, **Researcher** 2010-2011.

Dissertations

PhD Thesis (*Automatique/Génie Informatique*)

- "Wearable Obstacle Avoidance System Integrated with Conductive Yarns For Visually Impaired People", Ph.D., Université Lille 1(USTL) - Sciences et Technologies, (Automatique, Génie Informatique, Traitement du Signal et des images), 11/2011, France

PhD Thesis (*Textile Engineering*)

- "Wearable Obstacle Detection System Fully Integrated To Textile Structures For Visually Impaired People", Ph.D., Istanbul Technical University (İTÜ), Textile Engineering, 09/2011

MSc Thesis (*Industrial Engineering*)

- "Simulation of Production Line Modeling in Textile Industry", M.Sc., Istanbul Technical University (İTÜ), Fen Bilimleri Enstitüsü, Industrial Engineering, 06/2007

BSc Thesis (*Textile Engineering*)

- "The performance analysis of Anti-soiling agents applied on woven fabrics ", B.Sc., Istanbul Technical University (İTÜ), Textile Engineering, 06/2005

PUBLICATIONS

Book Chapters

S. Kursun Bahadır, V. Koncar, F. Kalaoglu, edited by Vladan Koncar (Ed.), "SMART TEXTILES AND THEIR APPLICATIONS,/ Chapter: Smart shirt for obstacle avoidance for visually impaired persons, The Woodhead Publishing, accepted to be published in 2016.

Senem Kursun Bahadır, Waldemar Grzechca (Ed.), "Assembly Line - Theory and Practice/ Chapter 5: Assembly Line Balancing in Garment Production by Simulation," 7/2011, ISBN: 978-953-307-995-0, InTech

Patent

Senem Kursun Bahadır, Simona Jevsnič, Fatma Kalaoglu, Slovenian Intellectual Property Office (SIPO), Patent no. P-24510, The hot air welding method for integration of electro-conductive yarns in the textiles, April 30, 2015

Published Articles in Journals (Expanded Science Citation Index (SCI))

S. Kursun Bahadır, S. Jevsnič, Optimization of hot air welding process parameters for manufacturing textile transmission lines for e-textiles applications: Part I: Electro-conductive properties, Textile Research Journal, accepted to be published in 2016. (SCI)

O. Atalay, S.Kursun Bahadır, F. Kalaoglu, "An Analysis on the Moisture and Thermal Protective Performance of Firefighter Clothing Based on Different Layer Combinations and Effect of Washing on Heat Protection and Vapour Transfer Performance", Advances in Materials Science and Engineering, 2015, DOI:10.1155/2015/540394 (SCI-Expanded)

S.Kursun Bahadır, S. Jevsnič, D. Fakin, U. K. Sahin, "Color and electrical resistance evaluation of cotton fabrics composed of stainless steel yarns treated with direct and reactive dyes", Textile Research Journal, 12/2015, DOI:10.1177/0040517515612357 (SCI)

S. Kursun Bahadır, F. Kalaoglu, S. Jevsnič, "The Use of Hot Air Welding Technologies for Manufacturing E-textile Transmission Lines", Fibers and Polymers, Vol. 16, No. 6, 06/2015, s. 1384-1394 (SCI-Expanded)

S. Kursun Bahadır, The Effect of Textile Pretreatment Processes on Signal Transferring Capability of Textile Transmission Lines, Fibres & Textiles in Eastern Europe, Vol. 23, 2(110), 2015, s. 55-62 (SCI-Expanded)

M.C. Bahadır, S.Kursun Bahadır, "Selection of appropriate e-textile structure manufacturing process prior to sensor integration using AHP", The International Journal of Advanced Manufacturing Technology, Vol. 76, No. 9, 2015, s. 1719-1730 (SCI-Expanded)

S. Kursun Bahadır, F. Kalaoglu, S. Jevsnik, S. H. Eryuruk, C. Saricam, "Use of Artificial Neural Networks for Modelling the Drape Behaviour of Woollen Fabrics Treated with Dry Finishing Processes", Fibres & Textiles in Eastern Europe, Vol. 2 (110), 03/2015, s. 90-99 (SCI-Expanded)

S. Kursun Bahadır, Decision of sensor location and best classification method for entrail and muscle disease detection in healthcare smart clothing based on acceleration measurements, Transactions of the Institute of Measurement and Control, 10/2014, doi: 10.1177/0142331214552513 (SCI-Expanded)

H. Sezgin, S.Kursun Bahadır, E. Boke, F. Kalaoglu, "Thermal analysis of e-textile structures using full-factorial experimental design method", Journal of Industrial Textiles, 06/2014, ISSN: doi. 10.1177/1528083714540699 (SCI-Expanded)

S. Jevsnik, F.Kalaoglu, C.Saricam, S.H.Eryuruk, S.Kursun Bahadır, D. Fakin, Z. Stjepanovic, "Fabric Hand of a Dry Finished Wool Fabric", Fibers and Polymers, Vol. 15, No. 12, 2014, s. 2671-2678 (SCI-Expanded)

S. H. Eryuruk, F. Kalaoglu, S.Kursun Bahadır, S. Jevsnik, "Analysing the Effect of Decatising on the Frictional Properties of Wool Fabrics", FIBRES & TEXTILES in Eastern Europe, Vol. 22, No. 3(105), 2014, s. 79-83 (SCI-Expanded)

S.Kursun Bahadır, S. Cebi, C. Kahraman, F. Kalaoglu, "Developing a smart clothing system for blinds based on information axiom", International Journal of Computational Intelligence Systems, Vol. 6, No. 2, 2013, s. 279-292 (SCI-Expanded)

S Kursun Bahadır, S. Thomassey, V. Koncar, F. Kalaoglu, "An algorithm based on neuro-fuzzy controller implemented in a smart clothing system for obstacle avoidance", International Journal of Computational Intelligence Systems, Vol. 6, No. 3, 2013, s. 503-517 (SCI-Expanded)

S Kursun Bahadır, V Koncar, F Kalaoglu, "Wearable obstacle detection system fully integrated to textile structures for visually impaired people", Sensors and Actuators A: Physical, No. 179, 07/2012, s. 297-311 (SCI)

S.Kursun Bahadır, F.Kalaoglu, V.Koncar, "Analysis of Vibrotactile Perception via e-Textile Structure Using Fuzzy Logic", Fibres & Textiles in Eastern Europe, Vol. 20, No. 6A(95), 11/2012, s. 91-97 (SCI-Expanded)

S.Kursun Bahadır, V.Koncar, F.Kalaoglu, "Crosstalk Effect In A Fabric Circuit Developed For Multi-Connection Of Sonar Sensors", Tekstil ve Konfeksiyon, Vol. 22, No. 3, 2012, s. 197-202 (SCI-Expanded)

S. Kursun Bahadır, V. Koncar, F. Kalaoglu, I. Cristian, S. Thomassey, "Assessing the Signal Quality of Ultrasonic Sensor on Different Conductive Yarns used as Transmission Lines", Fibres & Textiles in Eastern Europe, Vol. 19, No. 5(88), 2011, s. 75-81 (SCI-Expanded)

S. Kursun Bahadır, F. Kalaoglu, S. Thomassey, I. Cristian, V. Koncar, "A Study on the beam pattern of ultrasonic sensor integrated to textile structure", Journal of Clothing Science and Technology, Vol. 23, No. 4, 2011, s. 232 – 241 (SCI-Expanded)

S. Kursun, G. Ozcan, "Investigation of UV Protection of Swimwear Fabrics", Textile Research Journal, Vol. 80, No. 17, 2010, s. 1811-1818 (SCI)

S. Kursun, F. Kalaoglu, "Dikim Bandında Simulasyonla Bant Dengeleme", Tekstil ve Konfeksiyon, Vol. 20, No. 3, 2010, s. 257-261 (SCI-Expanded)

S. Kursun, F. Kalaoglu, "Simulation Of Production Line Balancing In Apparel Manufacturing", Fibres & Textiles In Eastern Europe, Vol. 17, No. 4(75), 2009, s. 68-71 (SCI-Expanded)

Papers Published in Conference Proceedings

S. M. Potirakis, , S. A. Mitilineos, P. Chatzistamatis, S. Vassiliadis, A. Primentas, D. Kogias, E. T. Michailidis, M. Rangoussi, S. Kurşun Bahadır, Ö. Atalay, F. Kalaoğlu, Y. Sağlam, "Physiological Parameters Monitoring Of Fire-Fighters By Means Of A Wearable Wireless Sensor System", The 5th International Conference On Materials And Applications For Sensors And Transducers, September 27-30, 2015, Mykonos, Greece

Senem Kursun Bahadır¹, Ozgur Atalay^{2*}, Fatma Kalaoglu³, Savvas Vassiliadis⁴, Stelios Potirakis, Performance Evaluation Of Welded Knitted E-Fabrics For Electrical Resistance Heating, International Conference On Electrical Systems, Technology And Information (ICESTI), 9th-12th September 2015, Bali, Endonesia

S.H. Eryuruk, S.K. Bahadır, F. Kalaoglu, Design Of Heating Panels For Protective Clothing, 5th International Istanbul Textile Congress 2015: Innovative Technologies "Inspire To Innovate" September 11th -12th 2015 Istanbul, Turkey

O. Atalay, S. Kursun Bahadır, F. Kalaoglu, And S.Vassiliadis, Development Of Textile-Based Temperature Sensor, 5th International Istanbul Textile Congress 2015: Innovative Technologies "Inspire To Innovate" September 11th -12th 2015 Istanbul, Turkey (

S. Jevšnik, F. Kalaoglu, S. Kursun Bahadır, Quality Assessment Of Hot Air Welded E-Textile Transmission Lines, 5th International Istanbul Textile Congress 2015: Innovative Technologies "Inspire To Innovate" September 11th -12th 2015 Istanbul, Turkey

S. A. Mitilineos, S. G. Vassiliadis, P. Grimanis, K. Rizopoulos, S. P. Savvaidis, N. A. Stathopoulos, S. Kursun, O. Atalay, F. Kalaoglu, Design Of A Textile Linear Spiral Antenna For Medical Imaging, 5th International Istanbul Textile Congress 2015: Innovative Technologies "Inspire To Innovate" September 11th -12th 2015 Istanbul, Turkey

5th International Istanbul Textile Congress 2015: Innovative Technologies "Inspire To Innovate" September 11th -12th 2015 Istanbul, Turkey

H. Sezgin, S. Kursun Bahadır, Y. E. Boke, F. Kalaoglu, Investigation Of Heating Behaviour Of E-Textile Structures, 17th International Conference On Materials Science, Engineering And Manufacturing, Rome Italy May 05-06, 2015, 17 (5) Part I

S.K.Bahadır, F.Kalaoglu, "Identification of Object Positioning through Smart Textile Structure using Artificial Neural Network", 08/2012, International Conference on Machine Learning and Computer Science (IML, Phuket, Thailand, 11.08.2012 - 12.08.2012

M.C. Bahadır, S.K.Bahadır, F.Kalaoglu, "An Artificial Neural Network Model for Prediction of Bursting Strength of Knitted Fabrics", 08/2012, International Conference on Machine Learning and Computer Science (IML, Phuket, Thailand, 11.08.2012 - 12.08.2012

H. Sezgin, S.K.Bahadır, Y.E.Boke, F.Kalaoglu, "Effect of Different Conductive Yarns on Heating Behaviour of Fabrics", 07/2012, RMUTP International Conference: Textiles & Fashion 2012, Bangkok,Thailand, 03.07.2012 - 04.07.2012

S.K.Bahadır, V. Koncar, F. Kalaoglu, S. Thomassey, "Wearable Obstacle Detection System Fully Integrated to Textile Structures for Visually Impaired People", 06/2012, s. 39-54, 12th World Textile Conference AUTEX, Zadar, CROATIA, 13.06.2012 - 15.06.2012

H. Sezgin, S. Kursun Bahadır, Y.E. Böke, F. Kalaoglu, "Examination of The Heat Manner of A Conductive Yarn with A Woven Fabric", 11/2011, SmarTex 2011, Egypt, 22.11.2011 - 24.11.2011

S. Kursun Bahadır, F. Kalaoglu, V. Koncar, "Comparison Of Multi-Connected Miniaturized Sonar Sensors Mounted On Textile Structure In A Different Position Angle For Obstacle Detection", 10/2011, International Conference on Intelligent Textiles & Mass Customisation, Casablanca, MOROCCO, 27.10.2011 - 29.10.2011(

S. Kursun Bahadır, V. Koncar, F. Kalaoglu, "Multi-Connection of Miniaturized Sonar Sensors onto Textile Structure for Obstacle Detection", 06/2011, AUTEX 2011, Mulhouse, FRANCE, 08.06.2011 - 10.06.2011

S.H. Eryuruk, S. Jevsnik, S. Kursun Bahadır, C. Saricam, F. Kalaoglu, "The Effect of Finishing Processes on Surface Properties of Wool Fabrics", 2011, AUTEX-2011, Mulhouse-FRANCE, 08.06.2011 - 10.06.2011

S. Kursun, F. Kalaoglu, V. Koncar, S. Thomassey, "Comparison On Perceived Vibrotactile Stimuli Of E-Textile Structures By Using Fuzzy Logic", 12/2010, 4th International Conference Of Applied Research In Textile, Monastir, TUNUS, 02.12.2010 - 05.12.2010

S. Kursun, V. Koncar, F. Kalaoglu, S. Thomassey, "Fuzzy Based Evaluation of Vibrotactile Perception By Using Vibration Motor Embedded To Woven Fabric", 06/2010, ICIT 2010, Seoul-KOREA, 16.06.2010 - 18.06.2010

F. Kalaoglu, C. Saricam, S. Kursun Bahadır, S.H. Eryuruk, S. Jevsnik, "The Effect Of Decatizing On The Mechanical Properties And Handle Of Wool Fabrics", 2010, CIRAT-4, Monastir-TUNUS, 02.12.2010 - 05.12.2010

S.Kursun, F. Kalaoglu, "Analyzing The Structure Of Pants Sewing Line In Apparel Manufacturing By Simulation", 2009, ITMC 2009 International Conference, MOROCCO, 12.11.2009 - 14.11.2009

I.Gocek, S. Kursun, Y. Iridag, "The Perception Of Customer Satisfaction In Textile Industry According To Genders In Turkey", 2007, WASET, Nice-FRANCE, 12.10.2007 - 14.10.2007

S. Kursun, F. Kalaoglu, C. Bahadir, I. Gocek, "A Study Of Assembly Line Balancing Problem In Clothing Manufacturing By Simulation", 2007, 16th IASTED International Conference On Applied Simulation And Modeling, Palma De Mallorca-SPAIN, 29.08.2007 - 31.08.2007

S. Kursun, F. Kalaoglu, "Analyzing The Bottleneck Problems On Production Line In Clothing Manufacturing By Simulation", 2006, 37th International Symposium On Novelties In Textiles, Ljubljana, SLOVENIA, 15.06.2006 - 17.06.2006

S. Kursun, G. Ozcan, "Effect Of Anti-Soiling Finishes On Woven Fabric Properties", 2006, 3rd International Textile, Clothing & Design Conference - Magic World, Dubrovnik, CROATIA, 08.10.2006 - 11.10.2006

F. Kalaoglu, S. Jevsnik, S. Vraz, S.H. Eryuruk, S. Kursun, "The Usage Of New Technologies For Studying The Effect Of Finishing Processes On The Mechanical And Drape Parameters Of Textile Materials", 2009, AUTEX 2009, Izmir-TURKIYE, 26.05.2009 - 28.05.2009

G.Ozcan, S. Kursun, "Impact Of Soil Release Finishes On The Physical And Chemical Characteristics Of Woven Fabrics", 2008, Fiber Society 2008 Spring Conference, Mulhouse-FRANSA, 14.05.2008 - 16.05.2008

I. Gocek, S. Kursun, "Nanotechnology For Textile Development", 2006, NanoItaltex 2006, Milano-ITALY, 15.11.2006 - 16.11.2006

Published Articles in National Journals

Selin Hanife ERYÜRÜK, Fatma KALAOĞLU, Senem Kurşun BAHADIR, Canan SARIÇAM, Simona JEVSNIK (2015): The Evaluation of Stiffness and Drape Behaviour of Wool Fabrics, Tekstil ve Mühendis, 22: 98, 24-32.

S. Kursun, M. Dincmen, F. Kalaoglu, "Production Line Modeling In Clothing Industry By Simulation", Tekstil, Vol. 58, No. 5, 2009, s. 186-195

S. Kursun, "Konfeksiyon İşletmelerinde Benzetimin Önemi", Konfeksiyon Teknik, No. 164, 04/2008

I. Gocek, S. Kursun, G. Kucuk, "Nanotechnology Applications In Textile Industry", Nonwoven Technical Textiles Technology Magazine, No. 14, 2007