

E.A.S.K Fernando

Department of Textile and Apparel Engineering

Full Name : Eliyadurage Asoka Sandun Keerthichandra Fernando

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CAREER HISTORY

- Professor - Textile & apparel Engineering, University of Moratuwa, Sri Lanka, Oct 2015 to date.
- Head - Department of Textile & Clothing Technology, University of Moratuwa, Sri Lanka, April 2006 - April 2009
- Senior lecturer I - Department of Textile & Clothing Technology, University of Moratuwa, Sri Lanka, Oct. 1999-Oct 2015.
- Senior lecturer II - Department of Textile & Clothing Technology, University of Moratuwa, Sri Lanka, Oct. 1993-Oct 1999.
- Temporary Senior lecturer - Department of Textile & Clothing Technology, University of Moratuwa, Sri Lanka, Feb. 1993-Oct. 1993.
- Temporary Instructor - Department of Textile & Clothing Technology, University of Moratuwa, Sri Lanka, June 1992 - Feb. 1993.

TEACHING & ADMINISTRATIVE ACTIVITIES

Teaching

1. (TE 2040) Woven Technology I,
2. (TE 2110) Weaving Technology II and Structures,
3. (TE4270) Advanced Weaving Technology & Structures
4. (TE4360)- Computer Aided Woven Fabric Design

Administrative Positions

Department/ Faculty Level (University of Moratuwa)

- 1.Member/ Technical Evaluation Committee to procure equipment for the faculty of engineering 2024.
- 2.Member/Faculty sub-committee to preparation of strategic and action plan ;Implementation of new field selection methodology 2023.
- 3.Member/faculty sub-committee to evaluate the proposal to convert the the degree programme to an engineering specialization 2018.
- 4.Head- Department of Textile & Clothing Technology (2006 – 2009).
- 5.Coordinator-MSc/PG Diploma in Textile & Clothing Management (2017 - 2020).
- 6.Member- Postgraduate Board of Studies (2017 –2020).
- 7.Overall Coordinator - Extension Courses for the Garment Industry; (1997-2002).
- 8.Coordinator-Extension course in quality control for the Garment Industry;(2004-2005).
- 9.Coordinator-Extension course in production organization and management for the Garment Industry;(2014-2017).
- 10.Member of panels/for evaluation of self-assessment reports of several academics for academic promotions. (2010 to date).
- 11.Member/BoS of postgraduate graduate programmes (2017-2020).
- 12.Member/faculty student emergency management committee 2017.
- 13.Member /staff student liaison committee-from 2015 to date.

Senate/University Level (Bylaws, Policies and Guideline Development Activities)

- 1.Member- Intellectual Property Assessment Committee (2017 March – 2020 Feb).
- 2.Member- Intellectual Property Advisory Committee (2017 March – 2020 Feb).

Senate/University Level (Other Activities)

- 1.Chairperson of the Panel of Examiners of PhD research Degree, Candidate 2023.
- 2.Member- Technical Evaluation Committees.
- 3.Member- Professor/Senior lecturer Promotion evaluation committees.
- 4.Chairperson / Panel of Examiners of M.Phil.research Degree, Candidate 2021.
- 5.Chairperson/ Panel of Examiners of M.Phil.research Degree, Candidate 2020.
- 6.Chairperson/ Panel of Examiners of M.Phil.research Degree, Candidate 2019.
- 7.Chairman/COI on sexual harassment of a femal student-May 2018.

- 8.Chairman/COI on examination offence of MLkk Gunathilaka-january 2017.
 - 9.Department Representative/ Engineering Research Unit (2016).
 - 10.Chairman/COI on incident of theft in the staff lodge,June 2016.
 - 11.Chairman/COI on examination offence of FBM Lambert-November 2016.
 - 12.Member/ Leave & Awards Committee (2006-2009).
 - 13.Member/ Hostel coordinating Committee (1999-2008).
 - 14.Member/Senate Committee (2006-2009) and 2015 to date.
 - 15.Actg. Warden/ Male Hostels (10/2002-02/2003).
 - 16.Member/committee on updating the university hand book 2000.
 - 17.Chairman /The Technical subcommittee of Sri Lanka University Games Moratuwa; 1995.
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RESEARCH ACTIVITIES

Research Interests

Weaving Machines & Weaving Technology and Smart Textiles

Key Research Areas

Weaving Machines & Technology, Smart Textiles, Medical Textiles

EDUCATION & PROFESSIONAL AFFILIATIONS

Education

- M.Sc. (Honours) in Textile Engineering, Textile Institute of Ivanovo (Ivanovo State Polytechnic University) Russia, 1987
- PhD in in Textile Technology, Textile Institute of Ivanovo (Ivanovo State Polytechnic University) Russia,1992

Professional Affiliations

1. Chartered Textile Technologist (C Tex),UK
 2. Fellow, Textile Institute (FTI), UK
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CAREER

Positions Held

Ministry/National Level

1. Moderator/Final examination papers of Bachelor of Technology/Dept of textile &Apparel Technology of The open University of Srilanka.(2011to date).

2. Post of Editor for bachelor of Technology Honours in Engineering for the text book /Engineering aspects of weaving 2020 to 2021.
3. Resource person/ three day tailor made workshops/seminar conducted for the apparel industry number of students per group 28-30 and number of days 63(21 sessions) from 2018 to 2020.
4. Coordinator/ three day tailor made workshops/seminar conducted for the apparel industry number of students per group 28-30 and number of days 63(21 sessions) from 2018 to 2020.
5. Chairman/Technical evaluation committee of label weaving factory 2021.
6. Resource person / Fabric and apparel manufacturing technology programme(Five day training) for the apparel industry 2018.
7. Coordinator of fabric and apparel manufacturing technology(Five day training) for the apparel industry 2018.
8. Member- Tender evaluation committee/National transport commission,2017.
9. Member the Panel of Examiners of M.Phil.research Degree Candidate,OUSL 2016.
10. Member- Tender evaluation committee/ Ministry of Public order,2016.
11. Member -Technical evaluation Committee/Tourism Development Authority, 2015.
12. Course Coordinator/Extension course in Production Organization & Management(2014&2015).
13. Visiting lecturer/department of textile & wearable arts at university of the visual& performing arts 2014.
14. Visiting lecturer ITUM/uom (2008-2014).
15. Member of the panel of Judges for National Handloom textile compition organized by the department of Textile Industry-2014.
16. Member/ Technical Evaluation Committee/Ministry of Education Services, 2014.
17. Coordinator/four day training programmes on fabric sourcing for the apparel industry 2010 & 2011.
18. Coordinator/two day advanced training programme on pattern creation and marker making on lectra system.2010.
19. Member of the Quality Assurance team to asses OUSL-2009.
20. Contribution in making manual "Competence and Beyond "A guide providing a holistic understanding of human capital in the apparel and textile Industry.
ISBN-955-1608-00-3.
21. Member/feasibility study for manufacturing & processing in Horana/BOI /Srilanka-2006.
22. Chairman- CoI Ministry of Industrial development 2006
23. Course Coordinator/Extension course in Quality control to garment Industry.(2004&2005)
24. Senior Consultant/Facult of Engineering/The open university of Srilanka 2003 to 2004
25. Overall coordinator - Extension Courses for the Garment Industry; (1997-2002).
26. Coordinator/Garment Technology three day Workshop for Unichela (pvt) Limited-2001
27. Coordinator/Pattern making four day Workshop for Lanka equities 2001
28. Coordinator/four day seminar for Production staff in Venture International(pvt) Ltd,2001
29. Chairman - Technical Evaluation Committee Ministry of Defense 1999/2000
30. Chairman - Technical Evaluation Committee Silk and Allied Products Development Authority 1999 .
31. Chairman - Technical Evaluation Committee for Cey-Nor Foundation Ltd., Ministry of Fisheries Aquatic Resources Development – 1998/99.
32. Coordinator/three day seminar for middle mangment in falcon apparel(pvt) Ltd,1999
33. Consultant for the Textile Industry since 1994.

Other Involvements

1. Series of seminars for Student Counselors of the University of Moratuwa- 2021.
2. Series of Workshops in student centered learning & curriculum development-2017.
3. One day workshop on intellectual property -2015.
4. Ten days/ Workshop on outcome based education methodology-2015.
5. Two day Workshop on patent drafting -2014.
6. 5S training programme organized by the Mechanical Engineering Department-2011.
7. Workshop on planning the new higher education project-2009.
8. One day work shop in student counseling-2006.
9. Workshop in/Seminar in Staubli Jacquards and Dobbies in France-2003.
10. Workshop/Seminar in Modern Techniques of Weaving in Italy. – 2002.
11. Training program in Electronic Jacquards in India - 2002.
12. Training course in CAD/CAM – System of label designing for narrow fabric looms for Label Weaving Machines in Switzerland – 2002.
13. Advanced course on Computer Aided Draughting using Auto cad.– 1997.
14. Training course in industrial sewing machine maintenance. – 1993.

HONORS & AWARDS

1. Best poster for the project mathematical model to measure energy absorption of sports bra-TERS2023.
2. Best paper of the year “ Evolution of 3D weaving and 3D woven structures” /of Fashion and textiles journal2022.
3. Outstanding research performances with distinction-2022 .
4. Outstanding research performances with distinction-2021.
5. Outstanding research performances with distinction-2016.
6. Outstanding research performances-2017.
7. The Best paper award For method and apparatus to weave a fully interlaced three-dimensional textile structure- MERCon 2017.
8. The quality product of the month awardThe smart textile fabric developed with EY Technologies,Textile world magazine, OCTOBER 2010.
9. US army Successful Project Award for the product developed with EY Technologies December 2011.

PUBLICATIONS & PATENTS

Book Chapters

1. Weaving Preparation, Advanced Woven Fabric Technology, ISBN No. 978-955-23-1456-8 **E.A.S.K.Fernando**, Wasantha Wimalaweera.,2012
2. Weaving machines and mechanisms,**E.A.S.K.Fernando**, Wasantha Wimalaweera ISBN No. 978-955-23-1457-5,2013
3. Weaving Accessories and Mill Environment, **E.A.S.K.Fernando**, Wasantha Wimalaweera ISBN No. 978-955-23-1458-2,2014
4. Weaving Economics and Quality Aspects, **E.A.S.K.Fernando**, Wasantha Wimalaweera ISBN No. ISBN 978-955-23-1459-9,2015
5. Theoretical Aspects of Weaving, **E.A.S.K.Fernando**, Wasantha Wimalaweera ISBN No. ISBN 978-955-23-1460-5,2016

Journals

- 1.D.M.M.P Lawrence, P.M.N Dilshan, K.P.M.C.K.B Karunarathne, P.L Liyanage, **E.A.S.K Fernando**, T.S.S Jayawardena – Design and Development of an Automated system for Cutting the Protruding length of the sewing Thread Cone, Journal of Multidisciplinary Engineering science and Technology (JMEST), ISSN:2458-9403, Vol.12 Issue 9, September-2025.
2. Nilhan Niles, **Sandun Fernando**, Sanath Jayawardene, Rajitha Nayanajith, Chathura Madushanka, Niles N, Fernando S, Jayawardene S, Nayanajith R, Madushanka C; Impact of a Projectile on Fabrics – An Experimental Test Method, Textile & Leather Review. 7:1096 1117.June 2024.
- 3.R.A.H.S. Ranawaka, S.D.M.W. Kularatne, **E.A.S.K. Fernando**, S.N. Niles, T.S.S. Jayawardane, R.K.P.S. Ranaweera; Developing a Medical Garment for Upper-Body Posture-Related Issues. Tekstilec, Vol. 67(2), 166-178 .May 2024
- 4.Philip R Fernando, T Kuhesan, N Yathursigan, GHD Wijesena, **EASKFernando**, TSSJayawardane.Investigation of the effect of yarn dyeing on the properties of 100% polyester woven fabrics. World Journal of Engineering Research and Technology, Vol. 9, Issue 11, 60-76.October 2023
- 5.Rathnayaka E M M W S ,Kalarooban , Fernando P ,Wijesena G H D ,**Fernando E A S K** , Jayawardane T S S ; Development of a mathematical model for weft yarn tension of an elastomeric weft insertion of rapier ;International Journal of Engineering and Techniques - Volume 8 Issue 6, November 2022 ISSN: 2395-1303 <http://www.ijetjournal.org> Page 72
- 6.Bulathsinghala, Rameesh Lakshan; Wijeyaratne, SeroshaMandika ;**Fernando sandun**; Jayawardana Thantirige Sanath; SenadhipathiMudiyanselage, Vishvanath Uthpala ;Kankanamalage Samith; Wearable Medical Apparatus to Monitor Temperature and Pulsatile Blood Flow Signal on Forefoot to Predict Diabetic Foot Ulcers; Research Journal of Textile and Apparel ; April 2022.
7. Rameesh Lakshan Bulathsinghala, **Sandun Fernando**,Thantirige Sanath SiroshanaJayawardana, NilanthiHeenkenda,Sajeeva Jeyakumar, Prathees Packiyarasa, Gamage Hemamala and DhananathaWijesena;An automatic air inflated tubeless safety jacket for motorbike riders; Research Journal of Textile and Apparel ; April 2022.
8. Bulathsinghala, R.L., **Fernando, S.**, Jayawardana, T.S.S., Heenkenda, N., Jeyakumar, S., Packiyarasa, P., Hemamala, G. and Wijesena, D. (2022), "An automatic air inflated tubeless safety jacket for motorbike riders", Research Journal of Textile and Apparel, Vol. 26 No. 2, pp. 170-186. <https://doi.org/10.1108/RJTA-01-2021-0002>
9. Yasith Sanura Perera* , Rajapaksha Mudiyanselage Himal Widooshaka Muwanwella, Philip Roshan Fernando,**SandunKeerthichandra Fernando** and Thantirige Sanath Siroshana Jayawardana; Evolution of 3D weaving and 3D woven fabric structures, Fashion and Textiles 2021.
10. Niles Nilhan; **Fernando Sandun**; Rathnayake Nipuni; Hewamalavi Ayesha; Weerasinghe, Samudika TWO-LAYER FABRICS FOR MOISTURE MANAGEMENT : Research Journal of Textile and Apparel - Decision on Manuscript ID RJTA-07-2020-0079 March 2021.
- 11.TSS Jayawardana, **EASK Fernando**, GHD Wijesena An Experimental Technique to Determine the Permissible Warp Tension Variation At the Required Pick DensityInternational Journal of

12. **E.A.S.K.Fernando**, T.S.S.Jayawardana,GHDWijesena “Modeling of cloth-fell movement on air jet loom”,European Journal of Fashion and Textile Engineering-open Access Journal,Vol1,Issue 03,2019.
13. T S S Jayawardana, **E A S K Fernando**, G H D Wijesena, “ Modeling and Analysis of Compressed Air Consumption of Air Jet Loom”, pp. 156-161, International Journal of Engineering Trends and Technology (IJETT) – Volume-54, Number-3, December 2017
14. **E A S K Fernando**, I G Dharmasena and S N Niles, “Kaolin shear thickening fluid reinforced UHMWPE composites for protective clothing “,pp. 241-244,Indian Journal of Fibre& Textile Research Volume- 42, June 2017,
15. TSS Jayawardana (co-worker), GHD Wijesena (co-worker) ,**EASK Fernando**, Rohana Kuruppu (co-worker), "Warp tension analysis of narrow fabric weaving and designing of tension compensator to avoid start up marks", International Journal of Engineering Trends and Technology (IJETT), ISSN:2231-5381, Vol. 30, issue 8, 393-399 December 2015
16. **EA Sandun K Fernando** and TSS Jayawardana (co-worker), “Development of Mathematical Model To Select Best Technological Parameters In Sizing”, Journal of Multidisciplinary Engineering Science and Technology (JMEST) ISSN: 3159-0040Vol2 Issue 6, June-2015
17. **EASK Fernando**, SN Niles (co-worker), AN Morrison (undergraduates), P Pranavan (undergraduates), IU Godakanda (undergraduates), MM Mubarak (undergraduates), “Design of a Bullet-proof Vestusing Shear Thickening Fluid” International Journal of Advanced Scientific and Technical Research (IJAST) ISSN 2249-9954, Vol. 1, Issue 5, February 2015,
18. **EASK Fernando**, R U Kuruppu (co-worker), “Tension Variation in Sectional Warping, Part I: Mathematical Modeling of Yarn Tension in a Creel” International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Vol.4, Issue 3, February 2015,
19. S N Niles (co-worker), **S Fernando** and G Lanarolle (co-worker), “A System for Analysis, Categorization and Grading of Fabric Defects using Computer Vision” , Research Journal of Textile and Apparel, ISSN: 1560-6074, Vol.19,No.1 2015,
20. **EASK Fernando** and TSS Jayawardana (co-worker), “Designing of Tension Control Device to Minimize Tension Variation across Weaver’s Beam during Weaving” Research Journal of Textile and Apparel, ISSN: 1560-6074, Vol.19,No.3 2015.
21. **Sandun Fernando** and TSS Jayawardana, "Designing of Tension Control Device to Minimize Tension Variation across Weaver’s Beam during Weaving", Manuscript ID RJTA-2014-01-0002, Research Journal of Textile and Apparel, 2014.
22. Mr. SN Niles, **S Fernando** and G LanarolleA System for Analysis, Categorization and Grading of Fabric Defects using Computer Vision (RJTA-2013-01-0002) , Research Journal of Textile and Apparel. 2014 .
22. **Sandun Fernando**; TSS Jayawardana, “Measurement of Seam Puckering and Influence of its Causes”, IOSR Journal of Engineering (IOSRJEN), Vol. 04, Issue 04, April. 2014.

23. **EASK Fernando** “mathematical model for warp tension with various back rest settings and relationship with technological parameters” International Journal of General Engineering and Technology (IJGET) ISSN (P): 2278-9928; ISSN (E): 2278-9936 Vol. 3, Issue 2, pp.17-26, March 2014.
24. **EASK Fernando**, TSS Jayawardana “Mathematical Modeling of Weft yarn Tension in Pirn Winding”, Asian Transactions on Engineering (ATE ISSN: 2221-4267), Volume 03, Issue 03, pp 11-17, July 2013.
25. Tissera, **Sandun Fernando**, Madhurangi Gamage. “Mathematical Modeling of Loom Gaiting System to Define the Relationship Between Warp Yarn Tension and Pick Density”, International Journal of Mathematical Modeling, Simulation and Applications: ISSN: 0973-8355 Vol.1 No.3, 2008.
26. T.M.J.A Cooray, **Sandun Fernando**, “The Nonlinear Dynamics of Over-end Unwinding yarn” Package/Theory and Experiment, Journal of National Science Foundation, Volume: 35, No.4, December 2007.
27. **S. Fernando** “Analysis of sizing process in the size box of a sizing machine”-Textile and Clothing Magazine October-December 2001, Vol. 04, 2001.
28. S.N. Niles, **S. Fernando** and N. De Silva, “Objective assessment of fabric defects and design of a computerized inspection system” Research for industry, 7th Annual symposium, 2001.
29. **S. Fernando** “Analysis of Fabric formation and Independence between yarn and Fabric Parameters”, the journal of Novelty in techniques and Technology of Textile Production, Moscow, 1990,
30. **S. Fernando** “Theoretical Analysis of Yarn Mechanics, Deformed on Bending and Coupling”- Mono Graph; - Light Industry - Ivanovo. No.3168 – 1990,
31. **S. Fernando** “Determination of Flexural Rigidity Factor of thread at nonlinear Dependence of Stress Deformation”, Technology of Textile Production- No. 5, 1990. Ivanovo.
32. **S. Fernando** “The calculations of fabric formation parameters” Special research works. / Textile Institute of Ivanovo, 1989.
33. **S. Fernando** “The Mechanics of fabric formation”, the journal of Scientific Developments, Ivanovo, 1988.

Conferences/Symposium

- 1.Liyanage P.L , Prasanga V.S.H, T.S.S. Jayawardana Eng. S.N. Niles, Mr. Philip R. Fernando, E.A.S.K Fernando Mathematical Model to Measure Energy Absorption of Sports Bra MERCon, July 2023
- 2.Machine Learning-based Approach for Modelling Elastic Modulus of Woven Fabrics Windula Kularatne; Hasitha Sampath Ranawaka; Sandun Fernando; Nilhan Niles; Tss Jayawardana; Pubudu Ranaweera MERCon, July 2020.
- 3.Design and Fabrication of an Automatic Tension Regulation System for Needle Thread L.M.L Randima, D.M.B.C Sandaranga,, T.S.S. Jayawardana, E.A.S.K. Fernando MERCon, May 2019.

4. Analysis of the Dimensional Change of Woven Fabrics from Loom State to Finished State .K.A.S.M.Kandemulla,,A.R.L.Maduwantha, E.A.S.K.Fernando, S.N.Niles T.S.S.Jayawardana, MERCon, May 2018.
- 5.S Weerasinghe, EAP Vishmith Osara, KKSK Senarathna, SAUK Senarath, EASK Fernando, “ Method and apparatus to weave a fully interlaced three-dimensional textile structure”, MERCon, May 2017, T1S6B-2
- 6.D.P.I.U. Gunarathna, R.K.D.N. Kumari, S.G.A.K. Subawickrama, E.A.S.K. Fernando, T.S.S. Jayawardana, “ Modeling of Compressed Air Requirement for Different Weft Yarns on Air Jet Weaving”, MERCon May 2017, T1S6B-1
- 7.E A Sandun K Fernando, Thilini Paravithana (undergraduates), Upul Dissanayaka (undergraduates), Wathsala Premarathna (undergraduates), Anees Atambawa (undergraduates), “Effect of particle size reduction on the performance of sized warp yarns” MERCon 2015, Engineering Research Unit(ERU),University of Moratuwa, Sri Lanka 2015.
- 8.Thilanka Dayaratne (undergraduates), Ranishka Premakumara (undergraduates), Thanura Perera (undergraduates), Stephan Prince (undergraduates), EA Sandun K Fernando, Sanath Jayawardane (co-worker) “Mathematical Analysis of Startup Mark in Elastic Tape on a Narrow Fabric Loom”, MERCon 2015, Engineering Research Unit (ERU), University of Moratuwa, Sri Lanka 2015
- 9.Tharindu Athauda, Sandun Fernando, T.S.S. Jayawardana, S.N. Niles Measuring the Heart Pulse Rate of a Human Body Using a Smart Textile Panel, 16th ERU Symposium, Faculty of Engineering, University of Moratuwa, 2010
- 10.R.A.R.C. Gopura, Saga University, Japan, Sandun Fernando, K.G.A.H. Amarasena Innovative Design of a Rotational Type Heat Exchanger, 14th ERU Symposium, Faculty of Engineering, University of Moratuwa, 2008.
- 11.T.M.J.A Cooray, Sandun Fernando “Mathematical modeling of over end yarn withdrawal and a device for uniform unwinding tension”, Textile Institute world conference, 2007.
- 12.Sandun Fernando, J.M.P Gunasekara, R.A.R.C Gopura. Cost effective system for Weft Tension Control and Wastage Disposal in Rapier Loom Textile Institute World conference 2007, Sri Lanka, 2007.
- 13.S. N Niles, Sandun Fernando Analysis of Woven fabrics Defects & Design a cost Effective fully Automatic Fabric Grading System –Abstract/ International Scientific and Technical conference “PROGRESS 2007”, IVANOVO, 2007.
- 14.R.A.R.C Gopura, J.M.P Gunasekara and Sandun Fernando “Design of a weft Gripper system for required weft tension on Rapier loom”, 12th Annual symposium “Research for Industry”, November 2006.
- 15.Sandun Fernando “A system for the minimization of water wastage in water jet weaving by recirculation”, 7th Asian Textile Conference held in December 2003, India.
- 16.S.N. Niles, Sandun Fernando and WDG Lanarolle “A computer system for the analysis of fabric defects and grading”, 7th Asian Textile Conference held in December 2003, India
- 17.Sandun Fernando, “Theoretical analysis of surplus length of the pick during weft inserter braking on the projectile loom”, 7th Asian Textile Conference held in December 2003, India.

Patents

- 1.E. A. S. K. Fernando,Medical garment for the posture related issues –Patent No-22080-2025.
 - 2.E. A. S. K. Fernando, Wearable Medical Apparatus to Monitor Temperature and Pulse Rate on Forefoot to Predict Diabetic Foot Ulcers-Patent No- 21789-2024,Srilanka.
 - 3.E. A. S. K. Fernando ,Automatic on line tension controller system across the warp on a weaving machine- Patent No: 17727-Dec 2015, Sri Lanka.
 - 4.E. A. S. K. Fernando Automatic on Line Moisture Controller System for High Speed Weaving- Patent No: 17727- Dec 2015, Sri Lanka.
 - 5.R. A. R. C. Gopura, E. A. S. K. Fernando, J. M. P. Gunasekara and K. G. A. H. Amarasena, “Weft Tension Control, Weft Gripping Device for Rapiar Loom,” Patent No.-14896, February 2008.
 - 6.E. A. S. K. Fernando and R. A. R. C. Gopura, “Double Rotor, Non-scaling, Self-Cleaning and Rotational type Heat Exchanger,” Patent No. -14030, March 2006.
 - 7.E. A. S. K. Fernando,Method of measuring flexural rigidity factor on bending - Patent No: 1824530, 1992, Russia
-

OTHER

Activities in Journals

- 1.Reviewer of research papers of Textile research journal(UK) to date.
- 2.Reviewer of research papers of Journal of textile and apparel(Hongkong) to date.
- 3.Reviewer of research papers of Journal of textile & Fibres(India) to date .
- 4.Reviewer of research papers of Textiles in Eastern Europe(Poland) to date.

Conference Activities

SessionChair/Track Chair

1. Session chair for MECon2024 Textile and Apparel track.
2. Session chair for MECon2023 Textile and Apparel track.
3. Session chair for MECon2021 Textile and Apparel track
4. Session chair for MECon2015Textile and Apparel track
5. Session chair for Mini ERU2013 Textile track

Other Activities

1. Member/Organizing committee/The2nd Annual Textile and Apparel Engineering Research Symposium-2024.
2. Member/Organizing committee/ The1st Annual Textile and Apparel Engineering Research Symposium-2023.
3. Member/Organizing committee/ Impact of Brexit International Conference,MUTA-2017.

Supervised PhD ,MPhil and MSc

- PhD in Textile & Apparel Engineering

Title of Research: Minimizing the tolerance of yarn length in cone yarn packages – PhD, 2024.

Name of the student :T.M.Aslam

- M.Phil in Textile & Clothing Technology 2004

Title of Research : A System for Analysis, Categorization and Grading of Fabric Defects using Computer Vision.

Name of the student : S N Niles

- MEng / PG Diploma in Manufacturing Systems Engineering 2005

Title of Research: design of a weft gripper system for required weft tension on rapier loom.

Name of the student : J.M.P Gunasekara

Department of Mechanical Engineering

Ongoing Postgraduate Research

- 1.Minimizing the tolerance of yarn length in cone yarn packages 2024.
 2. Developing a therapeutic fabric to provide heat treatment for muscle injuries 2024.
 - 3.Designing a Shock-Absorbent and safety Attachment for Skydiving Shoe 2024.
 - 4.Designing a test method to measure the impact on fabrics 2023.
 5. Prediction of warp breakages and strength improvement of weaker ends during weaving 2023.
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