CURRICULUM VITAE

Name in Full: ATHTHANAYAKE ATHULA INDRARATNE PERERA

Address :

    i. **Residence :** " No 441/29, Sooriyagoda, Murutalawa.

          Tel: ++94-81-4920864

    ii. **Official :** Department of Mathematics, Faculty of Science,

University of Peradeniya, Sri Lanka,

          Tel: ++94-81-239 4560

Date of Birth :   15th November 1959

Marital Status: Married

Citizenship :   Sri Lankan by Descent

Current Employment: Department of Mathematics,

University of Peradeniya, Sri Lanka.

Educational Qualifications:

    (a). University Education:

        (i).Royal Melbourne Institute of Technology (RMIT)

          City Campus, Melbourne, Australia.

          Period : 29.03.1996 - 02.07.1999

          Degree: Ph.D. in Mathematics.

        (ii).University of Oslo, Norway.

          Period: 16.08.1988 - 04.10.1991

          Degree: M.Sc. in Mathematics.

        (iii).University of Peradeniya,Sri Lanka

          Period: 03.03.1981 - 31.12.1984

          Degree: B.Sc. (Special) in Mathematics.

    (b). School Education:

        Harischandra Maha Vidyalaya, Negombo, Sri Lanka.

        Period: 02.01.1965 - 30.04.1979

Scholarships, Special Achievements in Academic/Professional Career

1981   *University Scholarship* for the best performance of the General Science Qualifying Examination, University of Peradeniya, Sri Lanka.

1984   Was the Top of the batch with Second Class UpperDivision Honors, Special Degreeprogramme in Mathematics, Faculty of Science, University of Peradeniya, Sri Lanka.

1988*Norwegian Government Scholarship*for Master's Degree in Mathematics, University of Oslo, Norway.

1996   *Overseas Postgraduate Research Scholarship*(OPRS)for Ph.D. in Mathematics,RMIT City Campus, Australia.

1999Ranking as Outstanding Research Performances of Ph. D. in Mathematics.

2002Won the award for "the most commendable presentation" (undergraduate category), Research Sessions, University of Peradeniya, Sri Lanka

Teaching Experience

Temporary Assistant Lecturer – Department of Mathematics, University of Peradeniya (January 1985 – October 1985).

Probationary Lecturer   – Department of Mathematics, University of Peradeniya (November 1985 – October 1991).

Senior Lecturer Grade II – Department of Mathematics, University of Peradeniya (October 1991 – January 1998).

Senior Lecturer Grade I – Department of Mathematics, University of Peradeniya (February 1998 – September 2009).

Professor in Mathematics – Department of Mathematics, University of Peradeniya (September 2009 –September 2017).

Senior Professor in Mathematics – Department of Mathematics, University of Peradeniya (September 2017 – to date)

Visiting Lecturer - Open University of Sri Lanka (1986 – 1987).

- Faculty of Agriculture, University of Peradeniya, Sri Lanka (1986 -1987)

- Faculty of Applied Sciences, RajarataUniversity of Sri Lanka, (1999 – 2013).

- Faculty of Applied Sciences, SabaragamuwaUniversity of Sri Lanka. (2000 - 2002)

Lecturer/ Tutor- RMIT City Campus, Australia (1996 - 1999).

Postgraduate Level

Visiting Lecturer-Postgraduate Institute of Science, University of Peradeniya, Sri Lanka.
(2000 – to date)
Postgraduate Programmes:

(i) M.Sc. programme in Computer Science,

(ii) M.Sc. programme in Industrial Mathematics

(iii) M.Sc. programme in Science Education

(iv) M.Sc. programme in IT

(v) Postgraduate Diploma in IT

Visiting Lecturer - Postgraduate Institute of Agriculture, University of Peradeniya, Sri Lanka(2001 – 2016).

Postgraduate Programme - M.Sc. programme in Bio Statistics

Current Administration Positions

Senior Professor in Mathematics: Department of Mathematics, University of Peradeniya

Chairman: Board of Study in Mathematics, Postgraduate Institute of Science, University of Peradeniya

Chairman: Board of Study in Science, Center for Distance and Continuing Education (CDCE), University of Peradeniya

Member : Board of Management, Postgraduate Institute of Science, University of Peradeniya

Chairman: Board of Study in Mathematics, Postgraduate Institute of Science, University of Peradeniya

Member : Committee of Policy Document for External Degrees, University of Peradeniya

Coordinator: M.Sc. Degree programme in Computer Science, Postgraduate Institute of Science, University of Peradeniya (from 2000)

Coordinator: B.Sc. External Degree programme in Mathematics, IT and Applied Physics. Center for Distance and Continuing Education (CDCE), University of Peradeniya(will be started soon)

Research Publications / Conference Presentations:

Research Publications

1997 K.J.Horadam and AAI Perera, *Codes from Cocycles*,
Lecture Notes in Computer Science, Applied Algebra, Algebraic Algorithms andError Correcting Codes, 1255, 151-163.

1998 AAI Perera and K.J.Horadam, *Cocyclic generalized Hadamard Matrices and Central Relative Difference Sets*, Designs, Codes and Cryptography, 15, 187 – 200.

1999 A.A.I. Perera, Ph.D. Thesis on: Orthogonal Cocycles: Theory and Applications, RMIT City Campus, Australia.

2000 A.A.I.Perera and K.J.Horadam, *Factorization of RelativeDifference Sets,* Australian Journal of Combinatorics 22 pp.141-150 (2000),

2009 A.A.I. Perera, Equivalence of *Square Designs, Difference Sets and Complete Graphs*,Ceylon Journal of Science (Physical Sciences), University ofPeradeniya, Sri Lanka, Volume 15.

2009 A.A.I. Perera and A.G.K.N. Alupotha, *Integer Solutions of Non-Linear Diophantine Equations using Continued Fractions,* Ceylon Journal of Science (Physical Sciences), University of Peradeniya, Sri Lanka, Volume 15.

2011 A.A.I. Perera and B.T.G.S. Kumara,*Automated System for Nurse Scheduling Using Graph Coloring,* IndianJournal of Computer Science and Engineering (IJCSE), Vol 2, No 3, June-July.

2011 D.G.T.K. Samarasiri and A.A.I. Perera, *Mathematical Induction and Graph Coloring,*Indian Journal of Mathematics Trends and Technology (IJMTT), Volume 2, Issue 2.

2011D.G.T.K. Samarasiri and A.A.I. Perera, *Cocycles and Bilinear Forms,* Indian Journal of Mathematics Trends and Technology (IJMTT), Volume 2,

Issue 2.

2012W.N.P. Rodrigo, W.B. Daundasekara and A.A.I. Perera,
Pattern Generation for Two Dimensional Cutting Stock Problem,
Indian Journal of Mathematics Trends and Technology (IJMTT), Volume 3,
Issue 2.

2012W.N.P. Rodrigo, W.B. Daundasekara and A.A.I. Perera,
Pattern Generation for Two Dimensional Cutting Stock Problem with
*Location,*Indian Journal of Mathematics Trends and Technology (IJMTT),
Volume 3, Issue 2.

2013W.N.P. Rodrigo, W.B. Daundasekara and A.A.I. Perera,
A method for Two Dimensional Cutting Stock Problem with Triangular Shape
Items, British Journal of Mathematics and Computer Science y (BJMCS),
Volume 3, Issue 4, 750-771.

2013A.A.C.A.Jayathilaka,A.A.I. Perera and M.A.P.Chamikara, *Discrete Walsh*
*Hadamard Transform in Signal Processing Cocycles,*International Journal of
Research in Information Technology,(IJRIT), Volume 1,Issue 1.

2013   A.A.C.A.Jayathilaka, A.A.I. Perera and M.A.P.Chamikara, *Generation of*
Strongly Regular graphs from normalized Hadamard Matrices , International
Journal ofScientific and Technology Research (IJSTR) , Volume 2,Issue 2.

2013 M.A.P.Chamikara, S.R.Kodituwakku , A.A.C.A.Jayathilaka, A.A.I. Perera,
An Algorithm to Construct Super- Symmetric Latin Squares of Order 2^n ,
InternationalJournal ofScientific and Technology Research (IJSTR) ,
Volume 1,Issue 4 .

2013   A.A.C.A.Jayathilaka, A.A.I. Perera and M.A.P.Chamikara,*An Alternative method*
to construct Turyn type sequences of length 34, InternationalJournal
ofScientificandTechnology Research (IJSTR) , Volume 2,Issue 10.

2014 A.A.C.A.Jayathilaka, A.A.I. Perera and M.A.P.Chamikara, *A new set of 32 in equivalent Hadamard matrices of Goethals Seidel type,* ElixirInternational Journal (Applied Mathematics) Volume 69,Issue 4.

2014   A.A.C.A.Jayathilake, A.A.I.Perera, *Construction of Regular Hadamard Matrices and* $(4u^2, 2u^2 + u, u^2 + u)$*Designs from Non-normalized Hadamard matrices*, *3rd YSF symposium*, Volume 3, page 62.

2015 H.M.I.C.Herath, A.A.I.Perera, A.A.C.A.Jayathilake, *Generation of Steiner Quadruple Systems,*International Journal of Science and Research, Volume 4, Issue 12, December 2015, 1551-1558.

2015 W.N.P. Rodrigo, W.B. Daundasekara and A.A.I. Perera, *Modified Method for One Dimensional Cutting Stock Problem,* Journal of Software Engineering, Volume 3, No 3., 12-17.

2015 A.R.C. De Vas Gunasekara, A.A.C.A.Jayathilake**,**A.A.I.Perera, *A survey in Prime Number*s, Elixir International Journal, Volume 88, Issue 11, ISSN 2229-712X.

2016 A.R.C.De Vas Gunasekara,A.A.C.A.Jayathilake,A.A.I.Perera, *An application of Markov chain method applied to study the smoking cessation of U.S.A. adults*, Elixir advances in pure mathematics, Volume 94, 40400-40402.

2017   K. D. E. Dhananjaya, A.A.I. Perera and M.A.P.Chamikara, *The Quaternary Complex Hadamard Conjecture Of Order 2^n*, International Refereed Journal of Scientific Research in Engineering (IRJSRE) Volume 2, Issue 2 (Feb), PP. 07-15

2017   W. V. Nishadi, A. A. I. Perera, K. D. E. Dhananjaya, U. Uththamawadu. *An Algorithm to Construct Symmetric Latin Squares of Order* q^n *for* $q \geq 2$ *and* $n \geq 1$, American Journal of Engineering Research (AJER), Volume-6, Issue 2, 42-50.

2017   M.N.F. Sumaiya, W. V. Nishadi , A. A. I. Perera, K. D. E. Dhananjaya, U. Uththamawadu. *Generation of Compete Bipartite Graphs Using Normalized Hadamard Matrices,*Elixir Applied Mathematics, Volume 113, (49269-49271

2018   W. V. Nishadi, A. A. I. Perera, K. D. E. Dhananjaya, P. Gunathilake. *Formation of Compete Bipartite Graphs Using Quaternary Complex Hadamard Matrices,*International Journal of Precious Enginering and Applications(IJPERA), Volume 3,Issue 1.

2018   W. V. Nishadi, A. A. I. Perera, K. D. E. Dhananjaya, P. Gunathilake . *A Recurrence Relation to Construct 1- Factors of Complete Graphs, Elixir International Journal*, Volume 117.

2018   W. V. Nishadi , A. A. I. Perera, K. D. E. Dhananjaya, P. Gunathilake . *A Generation of Strong Regular Graphs from Quaternary Complex Hadamard Matrices, Ceylon Journal of Science*, Volume 47.

2019 D.M.T.B.Dissanayake and A.A.I.Perera, *Applications of Matroid Theory in Combinatorial Optimization and Projective Geometry*, Elixir International Journal(Discrete Mathematics), Volume 129,52994-52995.

2019 D.M.T.B. Dissanayake, R.A.S.T. Abeysekara, K.D.E. Dhananjaya, A.A.I. Perera, and P.G.R.S. Ranasinghe, *Prime Labeling of Complete Tripartite Graphs of the Form $K_{1,m,n}$*, Elixir International Journal (Applied Mathematics), Volume 130, 53092-53094.

2019 D.M.T.B. Dissanayake and A.A.I. Perera, *Prime Labeling of Complete Tripartite Graphs $K_{2,m,n}$ and $K_{3,m,n}$*, Elixir International Journal (Applied Mathematics),Volume 131,53284-53286.

2019 D.M.T.B. Dissanayake, M.D.M.C.P. Weerarathna, D.G.S.D. Dehigama and A.A.I. Perera, *k-Factors of k-Factorization of $K_{2^r,2^r,2^r,\ldots,2^r}$ with n-Partite sets for $k = 1,2$ and $n \geq 2, n,r \in \mathbb{Z}^+$*, International Journal of Research and Scientific Innovation, Volume VI, Issue IX, 34-38.

2020 D.M.T.B. Dissanayake and A.A.I. Perera, *Alternative method for construction of Steiner Triple Systems of order n; $n \equiv 1$ or $3 (mod\, 6)$ and $n > 12$*, InternationalJournal of Research and ScientificInnovation, Volume VI, IssueXII, 247-249.

2020 D.M.T.B. Dissanayake, M.D.M.C.P. Weerarathna and A.A.I. Perera, 3-*factors of* 3-*factorization of* $K_{3,3,3,\cdots,3}$ *with n-partite sets for all even integers* $n \geq 2$, InternationalJournal of Research and ScientificInnovation (IJRSI), VolumeVII.

2020 T.R.D.S.M. Thennakoon, M.D.M.C.P. Weerarathna and A.A.I. Perera, *Prime Labeling of NewlyConstructed Graph Using Star Graphs and Complete Bipartite Graphs*, Sumerianz Journal ofScientific Research, Vol. 3, No. 2, 10-17.

Published in Abstract form

1997 K.J. Horadam and A.A.I. Perera, *Codes from cocycles*, 12[th]International Symposium, AAECC-12, Toulouse, France, June 1997.

1997 A.A.I. Perera andK.J. Horadam, *Cocyclic Generalized Hadamard Matrices and Central RelativeDifference Sets,*Third International Conference on Combinatorial Computing. Melbourne, Australia.

1998 A.A.I. Perera, *Projective Representations, Monomial matrices and Normalized Cocycles*, 15[th]Victorian Algebra Conference, Melbourne, Australia.

1999 A.A.I. Perera, *Factorization of Relative Difference Sets*, Research Sessions,

University of Peradeniya, Sri Lanka.

2002   D.I.N.J. Sikurajapathi and A.A.I.Perera, *Coloring Graphs*, Research sessions, University of Peradeniya, Sri Lanka.

2003   S.Chandrakanth and A.A.I.Perera, *Scheduling Lecture Timetable in Course unit System using Graph Coloring,* Research Sessions, University of Peradeniya, Sri Lanka.

2004   R.D.D.K.Wijekularatne and A.A.I.Perera, *Implementation of a shortest path algorithm*, Research Sessions, University of Peradeniya, Sri Lanka.

2005   M.I.U. Wickramasekara and A.A.I.Perera, *Timetable System based on Graph Coloring*, Research Sessions, University of Peradeniya, Sri Lanka

2005 M.M.J.D. Maheepala and A.A.I.Perera, *Steiner Triple systems of higher orde*r, Research Sessions, University of Peradeniya, Sri Lanka.

2006 W.M.S.S.B.Doranegama and A.A.I. Perera, *Implimentation of Dijsktras Algorithum,* Research Sessions, Rajarata University of Sri Lanka.

2007   AGKN. Alupotha and A.A.I.Perera, *Integer solutions of non-linear Diophantine Equations using Continued Fractions,* Research Sessions, University of Peradeniya, Sri Lanka.

2008D.G.T.K. Samarasiri and A.A.I.Perera, *Applications of Graph Coloring*, Research Sessions, University of Peradeniya, Sri Lanka.

2008 J.P.J. Prabath, A.G.K.N. Alupotha and A.A.I.Perera, *Proposals to Improve Knowledge of Mathematics among the Undergraduates,*Research Sessions, University of Peradeniya, Sri Lanka.

2009   C.J. Samarasinghe and A.A.I.Perera, *Finding Minimum Cost for Construction of Telecommunication Network,*Research Sessions, University of Peradeniya,

Sri Lanka.

2009 N.M.P.S.K. Bandara and A.A.I.Perera, *Construction of new Graphs using Steiner TripleSystems and their Decompositions* Research Sessions, University of Peradeniya, Sri Lanka.

2010 D.G.T.K. Samarasiri and A.A.I.Perera, *A Survey on Generalized Hadamard Matrices and their constructions*,Research Sessions, University of Peradeniya, Sri Lanka.

2011 M.M. Gamini, P. Sethunga and A. A. I. Perera, *A Path Model for Mathematics Achievement and Sources of Self-Efficacy*, Research Sessions, University of Peradeniya, Sri Lanka.

2011 W.N.P.Rodrigo, W.B. Daundasekara and A.A.I.Perera, *Optimization model forCutting Stock problem with Pattern Generation,* Research Sessions, University of Peradeniya, Sri Lanka.

2011 A.M.C.U.M Athapattu A.A.I.Perera, *Group Representationsand Characters*, 29th Victorian Algebra Conference, La Trobe University, Melbourne, Australia.

2012A.A.C.A.Jayathilaka, A.A.I. Perera and M.A.P.Chamikara,*Turyn type sequences of length 34*,Research Sessions, University of Peradeniya. (PURSE).

2012 A.G.K.N. Alupotha, A.A.I. Perera, *A Linear Programming Model to Recognize the Arbitrage in the Currency Market*, Research Sessions, University of Peradeniya, Sri Lanka.

2014 A.A.C.A.Jayathilaka, A.A.I. Perera , *Construction of Regular Hadamard Matrices and $(4u^2, 2u^2+u, u^2+u)$ designs From Non- Normalized Hadamard Matrices , 3rd*YSF symposium, Volume 3, page 62.

2014 A.A.C.A.Jayathilaka, A.A.I. Perera and M.A.P.Chamikara,*Construction of*

Divisible Designs from Normalized Hadamard Matrices,
Peradeniya University International Research Sessions (iPURSE).

2014 R.K.B.Dorakumbura , A.A.I. Perera , *A New Algorithm for Highly Constrained Railway Timetabling* , Peradeniya University International Research Sessions (iPURSE).

2014A.A.C.A.Jayathilaka, A.A.I. Perera , M.A.P.Chamikara,*Fuzzification of One Dimensional Second Order Parabolic Partial Differential Equations,*
Wayaba University International Conference (WInC).

2014 A.A.C.A.Jayathilaka, A.A.I. Perera, A.M.S.K.Abeykoon , *Construction of 3-(v,k,λ) Designs From Hadamard Design,* Postgraduate Institute of Science, Research Congress, University of Peradeniya.

2014 A.A.C.A.Jayathilaka, A.A.I. Perera, A.M.S.K.Abeykoon , *Construction of (v,k,λ) Designs from Normalized Hadamard Matrices,*Postgraduate Institute of Science, Research Congress, University of Peradeniya. Vol 1, page 112.

2014   P.H.M.N.K. Herath and A.A.I. Perera, *An Artificial Neural Network Model for Predicting Dengue Outbreaks,* One Health International Conference, Faculty of Medicine, University of Peradeniya.

2014W.N.P. Rodrigo, W.B. Daundasekara and A.A.I. Perera,
Optimum Arrangement in r Two Dimensional Cutting Stock Problem with Circular Items, Postgraduate Institute of Science, Research Congress, University of Peradeniya.

2015   A.R.C.De Vas Gunasekara, A.A.C.A.Jayathilake, A.A.I.Perera, *Construction of Bipartite Graphs From Non-Normalized Hadamard Matrices,*PGIS Research Congress, Postgraduate Institute of Science, University of Peradeniya, Volume 02.

2015   H.M.I.C.Herath, A.A.I.Perera, A.A.C.A.Jayathilake, A New Method to Generate Steiner Quadruple systems using MATLAB Programming, Research Congress, Postgraduate Institute of Science, University of Peradeniya, Volume 02.

2016 A.R.C. De Vas Gunasekara, A.A.C.A.Jayathilake, A.A.I.Perera, *A Study of Smoking Cessation of U.S.A. Adults Using Markov Chain Method*, Peradeniya University International Research Sessions(iPURSE*)*, Volume 19, Page 277, November 2015.

2017 W.N.S.P.Perera, A.A.I.Perera, A.A.C.A.Jayathilake,*Graph Theoretical Approach in Traffic Light Assignment to Minimize Waiting Time in an Intersection in Kandy City.*PGIS Research Congress, Postgraduate Institute of Science, University of Peradeniya, page 55,Volume 03.

2017H. W. S. S. Jayathissa, A. A. I. Perera, D. Uththamawadu, *On the Pierce Expansion of Rational Numbers Between 0 and 1*. PGIS Research Congress, Postgraduate Institute of Science, University of Peradeniya, page 50,Volume 04.

2017 W. V. Nishadi, K. D. E. Dhananjaya and A. A. I. Perera, An Algorithm to Construct Factors of a Complete Graph of Even Number of Vertices, Peradeniya University International Research Sessions(iPURSE), Volume 21, Page 386, November 2017.

2019 D.M.T.B. Dissanayake, R.A.S.T. Abeysekara, K.D.E. Dhananjaya, A.A.I. Perera, and P.G.R.S. Ranasinghe, *Prime Labeling of a certain class of Complete Tripartite Graphs,* International Conference on Mathematics and Mathematics Education, University of Peradeniya, Volume 1, Page 15.

2019 D.M.T.B. Dissanayake,M.D.M.C.P. Weerarathna, D.G.S.D. Dehigama, K.D.E. Dhananjaya and A.A.I. Perera, *Prime Labeling of Roach Graph*, Postgraduate Institute of Science Research Congress, University of Peradeniya, Volume 6, Page 38.

2019   D.M.T.B. Dissanayake,M.D.M.C.P. Weerarathna, D.G.S.D. Dehigama, K.D.E. Dhananjaya and A.A.I. Perera, *k-factors of k-factorization of $K_{2,2,2,\cdots,2}$ with n-partite sets where $k = 1,2$ and $n \geq 2$*, Postgraduate Institute of Science Research Congress, University of Peradeniya,Volume 6, Page 34.

2020   D.M.T.B. Dissanayake, M.D.M.C.P. Weerarathna and A.A.I. Perera, *3-factors of 3-factorization of $K_{3,3,3,\cdots,3}$ with n-partite sets for all even integersn ≥ 2*, Ruhuna International Science and Technology Conference, University of Ruhuna, Volume 7.

2020T.R.D.S.M. Thennakoon and A.A.I. Perera,Prime labeling of a star graph, 7th Ruhuna International Science & Technology Conference, University of Ruhuna, Volume 7.

Thesis/Monographs/Books:

Thesis

1991M. Sc. Thesis
 Title: Reflexive Modules over Quotient Singularities and
 MaKey Correspondence.

   1999   Ph.D. Thesis
            Title: Orthogonal Cocycles: Theory and Applications.

Monographs

   2008   Title: A Monograph on Mathematics, *Steiner Systems*
        ISBN 978-955-51413-0-7.

   2008   Title: A Monograph on Mathematics, *Hadamard Matrices*

ISBN 978-955-98922-9-8.

2008   Title: A Monograph on Mathematics, *Graph Coloring*
ISBN 978-955-51413-1-4.

2008   Title:A Monograph on Mathematics, *Linear Diophantine Equations*
ISBN 978-955-51413-2-1.

Books

For Research students

(Authors: A.A.I.Perera and K.J. Horadam)

1999   Title: Factorization of Semi-regular Difference sets.

Department of Mathematics, RMIT City Campus, Melbourne, Australia.

ISBN: 0864590415.

For University students:(Author: A.A.I.Perera)

2008   APU 3244 - Graph Theory

Recommended book for Bachelor of Science Degree, Faculty of Natural

Sciences, The Open University of Sri Lanka.

2008   PUU 2144 - Group Theory I

Recommended text book for Bachelor of Science Degree, Faculty of Natural

Sciences, The Open University of Sri Lanka.

2009   PUU 4244 - Group Theory II

Recommended text book for Bachelor of Science Degree, Faculty of Natural

Sciences,The Open University of Sri Lanka.

For GCE (A/L) students

(Authors: A.A.I.Perera and Amitha Kumara)

2004   Title: Combined Mathematics "Algebra", 300 pages.

2005   Title: Combined Mathematics "Trigonometry", 130 pages.

2005   Title: Combined Mathematics "Calculus", 300 pages.

2005   Title: Self evaluations Questions and Answer Book, Part I, Volume 1, 180 pages.

2006   Title: Self evaluations Questions and Answer Book, Part II, Volume 2, 180 pages.

2006   Title: Self evaluations Questions and Answer Book, Part I, Volume 3, 180 pages.

2007   Title: Combined Mathematics "Coordinate Geometry", 222 pages.

2007   Title: Self evaluations Questions and Answer Book, Part I, Volume 4, 180 pages.

2008   Title: Combined Mathematics "Trigonometry"(English Medium), 130 pages.

2008   Title: Self evaluations Questions and Answer Book, Part I/II, Volume 5, 180 pages.

2010Title: 1000 Problemsin Calculus, New Syllabus
180 pages.

2011   Title: 150Solved Problems in Paper I, in Combined Mathematics, New Syllabus, 118 pages.

2016   Title: Matrices and Determinant, in Combined

Mathematics, New Syllabus, 105 pages, ISBN 978-955-51413-5 -2.

2020   Title: Permutations and Combinations, in Combined
Mathematics, New Syllabus, 100 pages, ISBN 978-955-51413-4 -9.

Translation of Books

2008   Translated G.C.E Advance Level text book Combined Mathematics
"Trigonometry" to English.

Editing Books, Monographs and Journals:

<u>Books</u>

2008   Title   : Introduction to Linear Programming

            Author: W.B. Daundasekara,Ph.D.

            ISBN : 978-955-51414-2-0

2008   Title   : Introduction to Differential Equations

            Author: W.B. Daundasekara, Ph.D.

            ISBN : 978-955-51414-3-7

<u>Monographs</u>

2008   Title   : A Monograph on Mathematics: *Optimization Theory with Set
Functions*

            Author: W.B. Daundasekara, Ph.D.

            ISBN :978-955-51414-0-6

2008   Title   : A Monograph on Mathematics: *Optimization Theory with n-Set
Functions*

            Author: W.B. Daundasekara, Ph.D.

            ISBN : 978-955-51414-1-3

<u>Journals/Proceedings</u>

2000   Referred the Journal paper: *Lineralized Permutations Cocycles*
        Discrete Mathematics Journal, USA

2001   Co-editor, Proceedings, Peradeniya University Research Sessions.

2000-2016 Refereed Abstracts/Extended abstracts of the proceedings of Research
Sessions, University of Peradeniya, Sri Lanka.

2017   Reviewer, Journal of National Science Foundation

Teaching and Academic Developments:
<u>Resource Person in Seminar/Workshops</u>

1992   "Applied Mathematics Workshop" for GCE(A/L)Teachers, organized by
        National Institute of Education, Colombo and Science Education Unit,
        University of Peradeniya, (21-24 February, 1992)

2003   Workshop on "Computational Mathematics", organized by Department of
        Mathematics and Postgraduate Institute of Science, University of Peradeniya,
(August 9 – 11, 2003)

2006   1st Short Course on "Computational Mathematics", organized by Department
        of Mathematics and Postgraduate Institute of Science, University of
Peradeniya, (May 19 – 21, 2006).

2007   Workshop for GCE(A/L) Combined Mathematics teachers organized by
        Department of Mathematics and Postgraduate Institute of Science, University
        of Peradeniya, (May 26 – 28, 2007).

2007   2nd Short Course on "Computational Mathematics", organized by
        Department of Mathematics and Postgraduate Institute of Science, University
        of Peradeniya, (July 12 – 15, 2007).

2007   Workshop for GCE(A/L) Combined Mathematics teachers organized by
        Department of Mathematics and Postgraduate Institute of Science,
        University of Peradeniya, (December 10 – 14, 2007).

2000-2010   Conducted Mathematics seminars for G.C.E. (A/L) students in High schools
             and National schools.

2013	Workshop for GCE(A/L) Combined Mathematics teachers organized by Uva Province education department(Oct 22-24).
2015	Workshop for GCE(A/L) Combined Mathematics teachers of the Central Province organized by Science Education Unit (Dec 2014-Jan 15).

Coordinator in Seminar/Workshops

2003   Coordinator: Workshop on "Computational Mathematics", organized by Department of Mathematics and Postgraduate Institute of Science, University of Peradeniya,9 – 11August, 2003.

2006   Coordinator: 1st Short Course on "Computational Mathematics", organized by Department of Mathematics and Postgraduate Institute of Science, University of Peradeniya,19 – 21 May, 2006.

2007   Coordinator: 2nd Short Course on "Computational Mathematics", organized by Department of Mathematics and Postgraduate Institute of Science, University of Peradeniya,12 – 15 July, 2007.

Participant in Seminar/Workshops

1991   College on Singularity Theory, InternationalCenter for Theoretical Physics, Trieste,Italy(19th August to 06thSeptember 1991).

2001   Costing and Financial Management, ADB Science & Technology Personal Development Project, BMICH, Colombo. (26th January 2001).

2006   Workshop on Curriculum Revision , Indra-Manel Hotel, Kandy.

2009   Workshop on Curriculum Revision, Faculty of Science, University of Peradeniya.

2008   Workshop on Curriculum Revision, Faculty of Science, University of Peradeniya.

2011   International Workshop on Hadamard Matrices and its Applications, RMIT University, Melbourne Australia.

Postgraduate Research Supervision

Institute: Postgraduate Institute of Science, University of Peradeniya.

<u>M.Sc. Completed</u>

Year	Name of the Student	Degree Programme
2004	S. Chandrakanth	M.Sc. inIndustrial Mathematics
2005	P.U. Liyanage	M.Sc. in Computer Science
2006	P.A.C.. Pitumpe	M.Sc. in Science Education
2006	W.A.D.H.G.M. Wijesekara	M.Sc. in Industrial Mathematics
2008	G.C. Karunaratne	M.Sc. in Computer Science
2009	H.D.S.N. Hettige	M.Sc. in Computer Science
2009	R. I Watagoda	M.Sc. in Computer Science
2009	M.T.G.D.M. Jayathilaka	M.Sc. in Computer Science
2010	GVD Priyantha	M.Sc. in Computer Science
2010	B.T.G.S. Kumara	M.Sc. in Computer Science
2010	N.G.M.G. Bandara	M.Sc. in Computer Science
2010	Y.D. Fernando	M.Sc. in Computer Science
2010	M.D.A.Gunasekara	M.Sc. in Science Education
2011	K.K.V.S. Kankanamge	M.Sc. in Science Education
2011	R.A.N.P. Rupasinghe	M.Sc. in Science Education
2013	W. I. Samarasekara	M.Sc. inComputer Science
2013	P. A. C. Deepani	M.Sc. inComputer Science
2014	W. N. P. Rodrigo	M.Phil in Mathematics
2014	W. G. D. C. Chandradasa	M.Sc. in Industrial Mathematics
2014	V. Thileeban	M.Sc. inComputer Science

2014	P. Kobikrishna	M.Sc. inComputer Science
2014	L. P. B. Senevirathna	M.Sc. in Science Education
2016	R. K. P. Kumara	M.Sc. inComputer Science
2016	K. W. M. S. B. Kamathewatta	M.Sc. inComputer Science
2016	J. C. Rajasinghe	M.Sc. inComputer Science
2016	S. P. Arachchi	M.Sc. inComputer Science

Undergraduate Research Project Supervision

Institute: Department of Mathematics, University of Peradeniya.

Year	Name of the Student	Title of the Project
2001	A.A.C. Kanchana	Groups and their Properties
2002	I.P.T. Gamage	Block Designs
2002	D.I.N.J. Sikurajapathy	Graph Coloring
2003	R.D.D.K. Wijekularatne	Implementation of Shortest Path Algorithm
2004	R.G.K.P.K. Jayalath	Representations and Character Theory
2005	M.M.J. D. Maheepala	Steiner Triple Systems of Higher Order
2006	J.A. Weliwita	Construction of Hadamard Matrices
2007	K.G.N. Alupotha	Integer Solutions of Non-Linear Diophantine Equations
2007	P. Chandrakala	Generalized Hadamard Matrices
2008	M.N.M. Naufan	Legender Symbols
2008	D.G.T.K. Samarasiri	Applications of Graph Coloring
2009	C.J. Samarasinghe	
2009	M.N.P.S.K. Bandara	Construction of New Graphs and Their Triangularization
2010	A.M.C.U.M.Athapattu	Group Representations and Characters
2011	C.V. Senevirathne	Applications of Graph Coloring
2012	C. Jayathilaka	Construction of Hadamard matrices

2013	A.M.S.K.Abeykoon	Graphs from designs
2013	N.M. Fasmin	Field Extensions & Lattices Diagrams
2014	A.R. C. De Vas Gunasekara	Number Theory
2014	P.H.M.N.K. Herath	Steiner System
2015	A.K. Muthunayake	Taxi Cab Numbers
2015	H. W. S. S. Jayathissa	Continued Fraction
2015	W. N. S. P. Perera	Application of Graph Theory
2016	M. N. F. Sumaiya	Complete Bi partite Graph
2016	W. V. Nishadi	Symmetric Latin squares
2017	A A N S Amarasinghe	Factorization of Complete Graphs
2017	G.Mathanki	Factorization of Complete Bipartite Graphs
2018	D M T B Dissanayake	Applications of Matroid Theory
2018	D S Dehigama	Applications of Graph Theory
2018	Priyadarshani	Graph Theory
2019	D Tennakoon	Prime Labeling

Institute: Faculty of Applied Sciences, RajarataUniversity of Sri Lanka

year	Name of the Student	Title of the project
2006	W.M.S.S.B. Doranegama	Implementation of Dijkstra's Algorithm

Contribution to Curriculum Development

Preparation of Syllabi

Course/Programme	Degree Programme	Institute
MT 120 – Foundation course in Mathematics MT 121 - Mathematics for Arts/Commerce I MT 122 - Mathematics for Arts/Commerce II	B.Sc. Degree programme	University of Peradeniya

MT 209 - Graph Theory MT 308 - Combinatorics		
MAT 3213 - Graph Theory MAT 4309 - Combinatorics	B.Sc. Degree programme	RajarataUniversity of Sri Lanka
MAT 1131 - Abstract Algebra I MAT 2331 -Abstract Algebra II MAT 2433 – Discrete Mathematics	B.Sc. Degree (on line) programme	RajarataUniversity of Sri Lanka
SC 536 - Graph Theory SC 532 - Combinatorics	M.Sc. Degree programme in Computer Science	Postgraduate Institute of Science, University of Peradeniya
ST 6101 - Vector Analysis ST 6103 - Group Theory	M.Sc. Degree programme in Bio Statistics	Postgraduate Institute of Agriculture, University of Peradeniya

Contribution to Institutional Development

years	Position	Contribution
2002-2004	ABD Coordinator	Maintained Computer Application Laboratory in the Department of Mathematics with a system analyst and two instructors. Asian Development Bank Project
2004-2007	Head of the Department	Established a Computer Laboratory in the Department of Mathematics for the students of B.Sc. degree programmes in Computation and Management, and Statistics and Operational Research.
2006	Head of the Department	Contributed to conduct two new degree programs in 2006. (i) B..Sc. in Statistics and Operational Research (ii) B..Sc. in Computation and Management.

2003-2005& 2007-2013	Management Studies Coordinator	Coordinated both MG 201 and MG 301, by finding lecturers, preparing time tables, supervising examinations, involving in grading exams and students matters.
2003-2004 & 2007-2016	Senior Treasure of Science Student Union	Coordinated students activities and guided students
2007-2012	Senior Treasure of Buddhist Brotherhood Association	Guided students for religions activities
2008-2014	Senior Treasure of Computation and Management Society	Coordinated students activities and guided Students for educational activities.

University and National Development Activities

1993-1994   Member/Faculty Library Committee, University of Peradeniya.

1996   Coordinator/Ancillary Mathematics, Faculty of Science, University of Peradeniya.

2000-2015   Chief Examiner/ G.C.E. (A/L) Combined Mathematics Marking panel
              Member/G.C.E. (A/L) Combined Mathematics Re-scrutiny Board.

2000-2003   Senior Treasurer / Science Teachers Association,University of Peradeniya.

2001-2002   Senior Treasurer / Science Student Union, University of Peradeniya.

2001-to date   Coordinator/ M.Sc. programme in Computer Science, PGIS,
                University of Peradeniya.

2002   Faculty representative, University Research Committee, University of Peradeniya.

2002   Warden, Jayathilaka Hall, University of Peradeniya.

2002-2004Coordinator / M. Sc. programme in Industrial Mathematics, PGIS,

University of Peradeniya.

2002-2004   Coordinator/ Computer Application Laboratory (conducted by ADB project)

Faculty of Science, University of Peradeniya.

2002-2005   Coordinator / Management Studies, Faculty of Science,
University of Peradeniya.

2002-2005   Secretary / Board of Study in Statistics and Computer Science
Postgraduate Institute of Science, University of ,Peradeniya.

2003-2004   Senior Treasurer / Mathematics Students Association
University of Peradeniya.

2002-2005   President / University Buddhist Association, University of Peradeniya.

2004-2007Head/Department of Mathematics, University of Peradeniya

2005-2008   Member/Board of Management, PGIS, University of Peradeniya.

2006-2012 Senior Treasurer / Buddhist Students Association, Faculty of Science,
University of Peradeniya.

2006-2013   Coordinator / Management Studies,Faculty of Science,
University of Peradeniya.

2007-2014 Senior Treasurer / Computation and Management Students Association
University of Peradeniya.

2007-2016Senior Treasurer / Science Students Union, University of Peradeniya.

2008   Faculty representative, University Research Committee, University of
Peradeniya.

2008-2009   Secretary / Board of Study in Statistics and Computer Science
Postgraduate Institute of Science, University of ,Peradeniya

2008-2009   Member/Faculty Library Committee, University of Peradeniya.

2009   Academic Coordinator/Online Degree programme in Physical Sciences,

             Rajarata University of Sri Lanka.

2010-2011   Treasurer / University of Peradeniya Science Alumni Association.

2011-2013   Head, Department of Mathematics, University of Peradeniya, Sri Lanka.

2017-2020   Head, Department of Mathematics, University of Peradeniya, Sri Lanka.

2017-2020 Chairman, Board of Study in Mathematics, Postgraduate Institute of Science,

University of Peradeniya, Sri Lanka.

2017-2020Member, Board of Management, Postgraduate Institute of Science,

University of Peradeniya, Sri Lanka.

2017-2020   Member, Board of Study in Science, CDCE, University of Peradeniya.

Jan-Mar 2017 Deputy Proctor, Faculty of Science, University of Peradeniya.

2017   Member, Programme Review Panel, Bachelor of Education (Hon) in Physical
             Science Degree (Non State Universities)

Name, Designation and Address of Referees

Prof. SR Kodituwakku   Prof. W.D. Daundasekara
Dean/ Faculty of Science,   Department of Mathematics
University of Peradeniya   University of Peradeniya,
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 I here by certify that the information given is true and correct.

   Date: 26.05.2020   Signature:athula perera