

CURRICULUM VITAE

MULATHA DISSANAYAKE MUDIYANSELAGE CHINTHAKA PRADEEP WEERARATHNA.

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PROFILE

I am encouraged by my curiosity and focus as a recent undergraduate of the field of Mathematics. My research interests are still wide and malleable. Having worked as an undergraduate student and a researcher at one of the top universities in Sri Lanka, I sincerely believe that my experience has urged me to further my research skills and expertise to a higher level. Also, I believe that the knowledge I have gained is little and there is much more to learn and re-learn.

PERSONAL INFORMATION

Name in full : Mulatha Dissanayake Mudiyanseleage Chinthaka Pradeep Weerarathna
Date of Birth : 08th August 1993
Age : 28 years
Gender : Male
Civil Status : Single
Nationality : Sri Lankan
School Attended : Kingswood College, Kandy (1999 - 2013)
NIC : 932211831V
Passport No : N8325245
Current Employment : Department of Mathematics, University of Peradeniya, Sri Lanka.

WORK EXPERIENCE

Lecturer (Probationary) - Department of Mathematics, Faculty of Science,
University of Peradeniya.
(From 19th July 2021 to up to-date.)

Assistant Lecturer - Department of Mathematics, Faculty of Science, University of Peradeniya
(From 21st February 2020 to 30th June 2021.)

Course Titles

- MT 303 – Differential Geometry (2 Credits)
- MT 203 – Ordinary Differential Equations (3 Credits)

Teaching Assistant - Department of Mathematics, Faculty of Science, University of Peradeniya.
(From 05th February 2019 to 20th February 2020.)

Course Titles

- MT 204 - Mathematical Methods (3 Credits)
- MT 307 - Complex Analysis I (2 Credits)
- MT 105 - Real Analysis I (3 Credits)
- MT 405 - Functional Analysis (3 Credits)
- MT 100 - Mathematics for Biological Students (2 Credits)

Member - Science Education Program in Faculty of Science, University of Peradeniya.

ACADEMIC QUALIFICATION

M.Phil. in Mathematics - Postgraduate Institute Science (PGIS), University of Peradeniya.
(Reading) (From 03rd June 2020 to up to-date.)
Reg. No. : PGIS/MT/M.Phil./2020./791

B.Sc. (Hons) - **First Class Honours**, Faculty of Science,
Special Degree in Mathematics University of Peradeniya, (2014 December – 2018 December)

Major: **Mathematics**

Minor: **Physics**

- Mathematics GPA: **3.93** out of **4.00**
- Overall GPA: **3.85** out of **4.0**

GCE (A/L) Examination (2013) - Kingswood College - Kandy.
Stream: Physical Science

Combined Mathematics	A
Physics	B
Chemistry	C

Z- Score: 1.4034

GCE (O/ L) Examination (2009) - Kingswood College - Kandy.

Mathematics	A
Science	A
Buddhism	A
Sinhala language and Literature	A
Geography	A
Agriculture and Food Technology	A
History	B
Art	C
English	C

ACHIVEMENTS AND AWARDS

2016 - 2nd place of **EUDOXUS** quiz competition organized by Mathematical Society, Faculty of Science, University of Peradeniya.

2018 - **University Award** for Academic Excellence.

RESEARCH PUBLICATIONS

Refereed Journals

- 2019** - D.M.T.B. Dissanayake, M.D.M.C.P. Weerathna, D.G.S.D. Dehigama, and A.C.G. Perera. *Constructing Strongly Regular Graphs from Skew - Hadamard Matrices*, *Elixir International Journal*, Volume 132, pp. 53347-53348, ISSN 2229-712X.
- 2019** - M.D.M.C.P. Weerathna, D.M.T.B. Dissanayake, D.G.S.D. Dehigama, and A.A.I. Perera. *k-Factors of k-Factorization of $K_{2^r, 2^r, \dots, 2^r}$ with n-Partite Sets for $k = 1, 2$ and $n \geq 2$, $r \in \mathbb{Z}^+$* , *International Journal of Research and Scientific Innovation (IJRSI)*, Volume VI, Issue IX, September, ISSN 2321-2705.
- 2020** - M.D.M.C.P. Weerathna, D.M.T.B. Dissanayake, and A.A.I. Perera. *3-Factors of 3-Factorization of $K_{3,3,\dots,3}$ with n-partite sets for all even integers $n \geq 2$* , *International Journal of Research and Scientific Innovation, (IJRSI)*, Volume VII, Issue I, January, ISSN 2321-2705.
- 2020** - T.R.D.S.M. Thennakoon, M.D.M.C.P. Weerathna, and A.A.I. Perera. *Prime Labeling of Newly Constructed Graph Using Star Graphs and Complete Bipartite Graphs*, *Sumerianz Journal of Scientific Research*, Vol.3, No.2, pp. 10-17, ISSN(e) 2617-6955, ISSN(p) 2617-765X.
- 2020** - M.D.M.C.P. Weerathna, D.M.T.B. Dissanayake, A.P. Batuwita, and A.A.I. Perera. *Prime Labeling of Snow Graph $Sn_{1,m}$* , *Elixir International Journal*, Volume 143, pp. 54452-54454, ISSN 2229-712X.
- 2020** - M.D.M.C.P. Weerathna, D.M.T.B. Dissanayake, W.V. Nishadi, K.D.E. Dhananjaya, T.R.D.S.M. Thennakoon, and A.A.I. Perera. *Consecutive Cyclic k – Prime Labeling of a Ladder Graph and Its Application to Crab Graph*, *Iconic Research and Engineering Journal*, Vol. 3, Issue 11, pp. 278-283, ISSN 2456 - 8880.
- 2020** - T.R.D.S.M. Thennakoon, M.D.M.C.P. Weerathna, and A.C.G. Perera. *Prime Labeling of Special Graphs*, *Iconic Research and Engineering Journal*, Vol. 3, Issue 12, pp. 84-86, ISSN 2456 - 8880.
- 2021** - M.D.M.C.P. Weerathna, A.P. Batuwita, and G.W.M.M.K. Dheerasinghe. *Prime Labeling of Circular Ladder Graph (CL_n)* , *Iconic Research and Engineering Journal*, Vol. 4, Issue 10, pp. 192-195, ISSN 2456 - 8880.

Abstracts

- 2019 -** M.D.M.C.P. Weerathna, D.M.T.B. Dissanayake, D.G.S.D. Dehigama, K.D.E. Dhananjaya and A.A.I. Perera, ***k-Factors of k-Factorization of $K_{2,2,2,\dots,2}$ with n-Partite Sets for $k = 1, 2$ and $n \geq 2$*** , Postgraduate Institute of Science Research Congress (PGIS RESCON), University of Peradeniya, Sri Lanka.
- 2019 -** M.D.M.C.P. Weerathna, D.M.T.B. Dissanayake, D.G.S.D. Dehigama, and A.C.G. Perera, ***Constructing Strongly Regular Graphs from Skew - Hadamard Matrices***, Postgraduate Institute of Science Research Congress (PGIS RESCON), University of Peradeniya, Sri Lanka.
- 2019 -** M.D.M.C.P. Weerathna, D.G.S.D. Dehigama, D.M.T.B. Dissanayake, K.D.E. Dhananjaya and A.A.I. Perera, ***Prime Labeling of Roach Graph***, Postgraduate Institute of Science Research Congress (PGIS RESCON), University of Peradeniya, Sri Lanka.
- 2020 -** M.D.M.C.P. Weerathna, D.M.T.B. Dissanayake and A.A.I. Perera, ***3-Factors of 3-Factorization of $K_{3,3,3,\dots,3}$ with n-Partite Sets for all even integers $n \geq 2$*** , Ruhuna International Science and Technology Conference (RISTCON), University of Ruhuna, Sri Lanka.
- 2020 -** M.D.M.C.P. Weerathna, T.R.D.S.M. Thennakoon, D.M.T.B. Dissanayake, and A.C.G. Perera, ***Prime Labeling of Newly Constructed Graphs Obtained by Replacing Each Edge of a Star Graph by a Complete Tripartite Graph***, Postgraduate Institute of Science Research Congress (PGIS RESCON), University of Peradeniya, Sri Lanka.
- 2020 -** M.D.M.C.P. Weerathna, D.M.T.B. Dissanayake, A.M.U.J.B. Abeysinghe, M.H.M.I. Kumari, and A.A.I. Perera, ***A Study on Product of Complete Bipartite Graphs of the form $K_{n,n}$; $n \in \mathbb{Z}^+$*** , Postgraduate Institute of Science Research Congress (PGIS RESCON), University of Peradeniya, Sri Lanka.
- 2020 -** M.D.M.C.P. Weerathna, D.M.T.B. Dissanayake, T.R.D.S.M. Thennakoon, K.D.E. Dhananjaya, and A.A.I. Perera, ***Prime Labeling of Centerless Double Wheel Graphs (CDW_{2n})***, Postgraduate Institute of Science Research Congress (PGIS RESCON), University of Peradeniya, Sri Lanka.
- 2020 -** M.D.M.C.P. Weerathna, T.R.D.S.M. Thennakoon, and A.A.I. Perera, ***Prime Labeling of Scorpion Graphs***, International Conference on Applied and Pure Science, (ICAPS), University of Kelaniya, Sri Lanka.
- 2021 -** M.D.M.C.P. Weerathna, A. M. C. U. M Athapattu, and A.A.I. Perera, ***The Chromatic Polynomial of the Scorpion Graph ($S_{(n,m,l)}$) for $n > 5$, where $n, m, l \in \mathbb{Z}^+$*** , Ruhuna International Science and Technology Conference (RISTCON), University of Ruhuna, Sri Lanka.

- 2021 -** M.D.M.C.P. Weerathna, D.M.T.B. Dissanayake, T.R.D.S.M. Thennakoon, and A.P. Batuwita, *Prime Labeling of the graph obtained by union of n copies of $K_{1,2}$ and CL_n* , International Conference on Mathematics and Mathematics Education (ICMME 2021), University of Peradeniya, Sri Lanka.
- 2021 -** M.D.M.C.P. Weerathna, T.R.D.S.M. Thennakoon, K.D.E. Dhananjaya, and A.A.I. Perera, *Plumeria Alba Graph and Its Prime Labeling*, International Conference on Mathematics and Mathematics Education (ICMME 2021), University of Peradeniya, Sri Lanka.
- 2021 -** M.D.M.C.P. Weerathna, A.A.I. Perera, and P.G.R.S. Ranasinghe, *On the number of 1-factors in a 1-factorization of the complete multipartite graph $K_{m,m,m,\dots,m}$ with an even number of n -partite sets*, Peradeniya University International Research Sessions (iPURSE), University of Peradeniya, Sri Lanka. (accepted)
- 2021 -** M.D.M.C.P. Weerathna, K.D.E. Dhananjaya, and A.A.I. Perera, *Reconstruction of wheel graphs*, Peradeniya University International Research Sessions (iPURSE), University of Peradeniya, Sri Lanka. (accepted)

Undergraduate Research Project

- 2018 -** Spiral Formation in Rayleigh Bernard Convection (Fluid Dynamics)

RESEARCH EXPERIENCES

- Final year research project in Fluid Dynamics.

Knowledge discovery from spiral formation in Rayleigh Bernard Convection, considering theory of spirals and instabilities, studied the convection pattern using General Swift-Hohenberg model and tried to study the spiral core.

- Currently engage research areas:

Graph Theory

Number Theory

Cryptography

Combinatorics

SYMPOSIUMS

- 2020 -** k -factors and k -factorizations of complete multipartite graphs. (delivered a talk) Australasian Graduate Symposium in Combinatorics.

WRITING MONOGRAPHS

- 2020 -** A Monograph on Mathematics, *Factors and Factorizations in Graph Theory* (ISBN No. 978-624-96814-0-8)

TRANSLATING AND TYPING TEXT BOOKS

- 2020 -** Co-Translator and Type setters of G.C.E. (A/L) Combined Mathematics, “**Algebra**” book written by Professor Athula Perera and Amitha Kumara in Sinhala to English. (ISBN No. 978-955-51413-7-6)

EDITING BOOKS

- 2019 -** One of the co-editors of G.C.E. (A/L) “**Permutation and Combinatorics**” book written in Sinhala medium by Professor Athula Perera and Amitha Kumara. (ISBN No. 978-955-51413-6-9)

ENGLISH PROFICIENCY

- IELTS exam, **Overall Score 6.0**, (in 2019)
 - Speaking - 5.5,
 - Writing - 6.0,
 - Reading - 5.5,
 - Listening - 6.0
- Successfully completed **Conversational English Skills** in an online non-credit course authorized by Tsinghua University in Beijing, China, and offered through Coursera.
- Successfully completed **Write Professional Emails in English** in an online non-credit course authorized by Georgia Institute of Technology, Georgia, USA, and offered through Coursera.
- Diploma in English (British Way English Academy - Kandy Branch)

IT SKILLS

- Successfully completed Computer application **AutoCAD 2010** in Vision Institute of Information Technology, Sri Lanka.
- Well-develop IT skills with application software packages.
 - MATLAB, Lingo, Microsoft Office, COMSOL, Latex, AutoCAD
- Successfully completed **Programming for Everybody (Getting started with Python)** in an online non-credit course authorized by University of Michigan, Michigan, USA, and offered through Coursera.

OTHER EDUCATIONAL QUALIFICATION

- Successfully completed **Matrix Algebra for Engineers** in an online non-credit course authorized by The Hong Kong University of Science and Technology, Hong Kong, and offered through Coursera.
- Successfully completed the **Human Resource Management** Diploma Level and Certificate Level [Training Institute of Human Resources Management (Pvt) Ltd.]

SPORTS

- Participated for Inter Batch Athletics, in the faculty 100 m, 200 m and 400 m.
- Member of Batch Cricket team.
- Member of School Western Cadet Band, Kingswood College (2007-2008).
- Member of School Athletic team, Kingswood College.

EXTRA CURRICULAR ACTIVITIES

- 2017 -** Committee Member of the Mathematical Society of Faculty of Science, University of Peradeniya.
- 2019 -** Member of the Organizing Committee of International Conference on Mathematics and Mathematics Education (ICMME 2019).
- 2019 -** Conducted Mathematics seminars for G.C.E. (A/L) students in Science Education Unit, Faculty of Science, University of Peradeniya.
- 2020 -** Member of the Organizing Committee of Faculty of Science Inaugural Session of the Orientation Program, University of Peradeniya.
- 2020 -** Member of the Organizing Committee of the Short Course Buffet on Computer and Data Science, offered by the Board of Study in Statistics and Computer Science, PGIS.
- 2020 -** Member of the Organizing Committee of the talk on Higher Study Opportunities in USA, offered by the Department of Mathematics, Faculty of Science, University of Peradeniya.
- 2020 -** Member of the Organizing Committee of the talk on Higher Study Opportunities in Australia, offered by the Department of Mathematics, Faculty of Science, University of Peradeniya.
- 2020 -** Supporting Member of the Postgraduate Institute of Science Research Congress, University of Peradeniya, Sri Lanka. (Hosted in the control room)
- 2021 -** Member of the Organizing Committee of the talk on Postgraduate Study Options, offered by the Department of Mathematics, Faculty of Science, University of Peradeniya.

2021 - Member of the Registration Committee of the International Conference on Mathematics and Mathematics Education (ICMME 2021).

- Participated and contributed for various social events as a university student.

EDUCATIONAL ACTIVITIES

- Resource Person - G.C.E. (A/L), Mathematics (Seminar), **St. Joseph's Balika Vidyalaya, Gampola.**
- Resource Person - **Science Camp - Anamaduwa Central College, Anamaduwa, Sri Lanka.** (Workshops for school children) (**2nd and 3rd November, 2019**)
- Resource Person - G.C.E. (O/L), Mathematics (Seminar), Wavinna Vidyalaya, Wattegama.
- Resource Person - Science Education Unit, Faculty of Science, University of Peradeniya.
- Member - School Science Society, Kingswood College.
- Sub Secretary - School Art Foundation, Kingswood College. (2009)
- Member - School Astronomical Society, Kingswood College.
- Member - School YES Society, Kingswood College.

TRAINING PROGRAMS

- Participated in the workshop on **Outcome Based Educational-Learner Centred Teaching**, Organized by the **AHEAD Project, Faculty of Science, University of Peradeniya (December 17th, 2020).**
- **Sri Lankan Ministry of Higher Education (October 04th, 2014 to October 24th, 2014)**
Training program on Developing Leadership Qualities & Positive Thinking.
- **Trainee** at National Saving Bank (NSB), Sri Lanka (**From May 2014 to October 2014**).

NON-RELATED REFEREES

1. Prof. A. A. I. Perera,
Senior Professor in Mathematics,
Department of Mathematics,
Faculty of Science,
University of Peradeniya,
Sri Lanka.
Tel: +94 714446676
Email: aaip@pdn.ac.lk
2. Dr. P. G. R. S. Ranasinghe.
Senior Lecturer in Mathematics,
Department of Mathematics,
Faculty of Science,
University of Peradeniya,
Sri Lanka.
Tel: +94 705580514
Email: rajitha_new@yahoo.com
3. Dr. T. H. K. R. De Silva,
Senior Lecturer in Mathematics,
Head of the Department,
Department of Mathematics,
Faculty of Science,
University of Peradeniya,
Sri Lanka
Tel: +94 718379386
Email: rkokum@gmail.com

I hereby certify that the above-mentioned information is true and correct according to the best of my knowledge.

Chinthaka Weerarathna

25.07.2021

