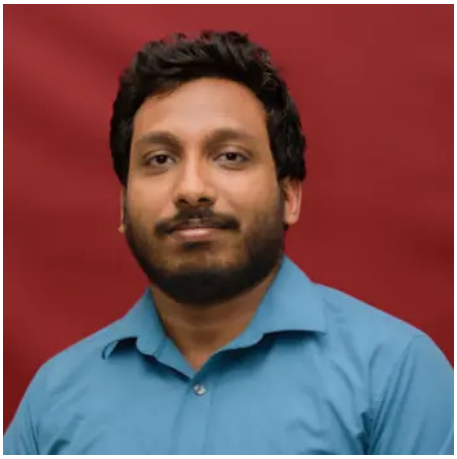
Department of Mathematics
Faculty of Science / University of Peradeniya



Dr. K.D. Eranda Dhananjaya

B.Sc. (Perad.), M.Sc. (NCHU), Ph.D. (NCHU)

Senior Lecturer

kded@pdn.ac.lk
edhananjaya1991@gmail.com
+94 78 163 7830
#

About Me

I am K. D. Eranda Dhananjaya, a researcher in graph theory, with primary research interests in antimagic labelling and antimagic orientations of graphs. I completed my Ph.D. in Mathematics and earned my Master's degree from National Chung Hsing University (NCHU), Taiwan. I obtained my Bachelor of Science degree from the University of Peradeniya, Sri Lanka, specializing in Mathematics, and I am currently affiliated with the Department of Mathematics, University of Peradeniya, Sri Lanka. I am interested in collaborative research and working with motivated undergraduate and postgraduate students in **graph theory and combinatorics,** particularly **graph labelling, graph colouring, and Ramsey theory.** Please feel free to contact me via email(dha

Higher Education Qualifications

PhD	MSc	BSc
National Chung Hsing University Taiwan (2025)	National Chung Hsing University Taiwan (2021)	University of Peradeniya Sri Lanka (2015)

Awards, Scholarships, Memberships & Fellowships

- University Award for Academic Excellence in 2015.
- Best Dissertation Award/Combinatorial Mathematics New Seed Workshop-2025
- Sing-Li Lecture Science Award(Academic Excellence)/National Chung Hsing University-2023
- Sing-Li Lecture Science Award(Academic Excellence)/National Chung Hsing University-2021
- Graduate academic Award/ National Chung Hsing University 2020-2025
- The Phi Tau Phi Scholastic Honor Society Honorary Membership
- Taiwan Scholarship
- NCHU Elite Scholarship
- Member of the Art Circle, Faculty of Science
- President of the Mathematical Society Faculty of Science 2012-2013
- Member of the “SAHODARA PIYAPATH “ Society, Faculty of Science

Positions Held

- Member of the Faculty Web Committee- (2015-Present)
- Graduate Teaching Assistant Teaching Assistant, Department of Applied Mathematics, National Chung Hsing University, Taiwan- (2019-2025)
- Research Assistant, Department of Applied Mathematics, National Chung Hsing University, Taiwan- (2019-2025)
- Visiting Lecturer, Open University, Sri Lanka- (2017-2019)
- Lecturer (Probationary), Department of Mathematics, University of Peradeniya, Sri Lanka- (2017-Present)
- Visiting Lecturer, Faculty of Allied Health Sciences, University of Peradeniya, Sri Lanka- (2018-2019)
- Visiting Lecturer, Faculty of Arts, University of Peradeniya, Sri Lanka- (2018-2019)
- Temporary Lecturer, Department of Mathematics, University of Peradeniya, Sri Lanka - (2016-2017)
- Temporary Demonstrator, Department of Mathematics, University of Peradeniya, Sri Lanka. - (2015-2016)

My Teachings

- MAT1032: Differential Equations
- MAT1212: Mathematics for Arts/Commerce I
- MAT2092: Graph Theory
- MAT3023: Real Analysis III
- MAT3032: Convex Analysis
- MAT3063: Topology I

Research Interests (Research Fields/ Projects)

Graph theory/ Combinotorics

Ongoing Research and Projects

Local antimagic orientations of graphs,

I am currently engaged in research on antimagic and local antimagic orientations of graphs, with a particular focus on the local antimagic orientation chromatic number. My work involves developing constructive labeling and orientation techniques, studying the effects of graph operations, and identifying structural properties that influence vertex sum distributions. This research aims to advance theoretical understanding in graph labeling theory and contribute new results to combinatorics and discrete mathematics.

Graceful labeling of spider graphs

I am also working on graceful labeling of spider graphs, focusing on the existence and construction of graceful labelings for different classes of spiders. This research explores structural conditions and labeling strategies that ensure graceful properties, contributing to broader developments in graph labeling theory.

Analyzing b-color local edge antimagic coloring in graphs

Key Publications

American Journal of Engineering Research (AJER) - (2017)

An Algorithm to Construct Symmetric Latin Squares of Order q^n for q>=2 and n >=1,

Conferences

Nothing to show under this subheading !!!

My Publications

Please goto the website.

https://sci.pdn.ac.lk/maths/staff/Eranda-Dhananjaya

