

# Menuja Perera

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## Education

### PhD, Mathematics

INDIANA UNIVERSITY

Apr 2021

Bloomington, Indiana

- Advisor: Prof. Norman Levenberg
- Thesis Title: Pluripotential Theory Associated with Convex Bodies

### MA, Mathematics

INDIANA UNIVERSITY

Aug 2020

Bloomington, Indiana

### Certificate in Teaching in Higher Education (CTHE)

STAFF AND EDUCATIONAL DEVELOPMENT ASSOCIATION (SEDA)

Apr 2014

London, United Kingdom

### Certificate in Teaching in Higher Education (CTHE)

STAFF DEVELOPMENT CENTER (SDC), UNIVERSITY OF COLOMBO

Jan 2014

Colombo, Sri Lanka

### BSc (Honors), Mathematics (First Class) - English medium

UNIVERSITY OF COLOMBO

Oct 2010

Colombo, Sri Lanka

## Work Experience

### Instructor

DEPARTMENT OF MATHEMATICS, VIRGINIA TECH

Aug 2020 - Present

Blacksburg, Virginia

- Teaching: Math 1225 - Calculus of a Single Variable (Online Synchronous) (Fa 20/Sp 21), Math 1225 - Calculus of a Single Variable (Face-to-Face) (Fa 21, Fa 22, Sp 23), Math 1226 - Calculus of a Single Variable (Face-to-Face) (Sp 22/Fa 22/Fa 23/Fa 24)

### Associate Instructor

DEPARTMENT OF MATHEMATICS, INDIANA UNIVERSITY

Aug 2014 - Jul 2020

Bloomington, Indiana

- Teaching: M025-Pre-Calculus Mathematics (Sp 20)
- Mentoring: Directed Reading Program-Introduction to Real Analysis (Fa 19)
- Conducting Recitation: M211-Calculus I (Fa 16, 18), M212-Calculus II (Fa 17)
- Grading: M415-Complex Variables (Sp 17, 19 / Su 18), M312-Calculus 4 (Sp 18), S343-Honors Course in Differential Equations (Fa 19)
- Assisting: M119-Brief Survey of Calculus 1 (Fa 14, 15 / Sp 16/ Su 17), M120-Brief Survey of Calculus 2 (Sp 16), M118-Finite Mathematics (Fa 15), V118-Finite Mathematics with Applications (Fa 19)
- Math Learning Center Tutoring: M211-Calculus I (Fa 16, 18), M212-Calculus II (Fa 17), M119-Brief Survey of Calculus 1 (Fa 14, 15 / Sp 16/ Su 17), M118-Finite Mathematics (Fa 15)

### Mathematics Tutor

FREELANCE

Aug 2017 - Jul 2020

Bloomington, Indiana

- Tutoring: Undergraduate Mathematics (Brief Survey of Calculus 1, Calculus I/II), AP Calculus AB and BC, High School Mathematics (Calculus, Algebra), Middle School Mathematics (Calculus, Algebra, Geometry), Elementary School Mathematics, GMAT Quantitative Section

### Probationary Lecturer

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF COLOMBO

Mar 2012 - Nov 2019 (on leave Fa 14 - Fa 19)

Colombo, Sri Lanka

- Teaching (English medium): FM3003-Calculus III (Sp 13), PM3003-Algebra (Sp 12), AM2002-Numerical Analysis I (Fa 12, 13), AM1006-Geometry with Applications (Sp 14)
- Conducting Recitation (English medium): PM3056-Real Analysis I (Sp 14)

### Assistant Lecturer

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF COLOMBO

Feb 2011 - Feb 2012

Colombo, Sri Lanka

- Teaching (English medium): PM3003-Algebra (Sp 12), AM1008-Mathematics for Biological Science (Fa 11)
- Conducting Recitation (English medium): PM2001-Calculus II (Sp 11), AM1006-Geometry with Applications (Sp 11)

### Temporary Instructor

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF COLOMBO

Sep 2010 - Jan 2011

Colombo, Sri Lanka

- Conducting Recitation (English medium): PM1001-Calculus I (Fa 10), PM2001-Calculus II (Sp 11), AM1002-Vectors (Fa 10), AM1005-Graph Theory (Fa 10), AM1006-Geometry with Applications (Sp 11)

## Publications

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M. **Perera**. Further Regularity Results in  $P$ -Extremal Setting. *The Journal of Analysis*

2024

<https://doi.org/10.1007/s41478-024-00794-5>

M. **Perera**. Pluripotential Theory Associated with General Bodies. *Annales Polonici Mathematici*, 130(1), 85-96.

2023

<https://doi.org/10.4064/ap220608-4-1>

M. **Perera**. A Transformation Rule Associated With  $P$ —Extremal Functions and Holomorphic Mappings. *The Journal of Analysis*, 31, 2097–2113.

2023

<https://doi.org/10.1007/s41478-023-00553-y>

T. Bayraktar, S. Hussung, N. Levenberg and M. **Perera**. Pluripotential Theory and Convex Bodies: A Siciak-Zaharjuta Theorem. *Computational Methods and Function Theory*, 20(3), 571-590.

2020

[arXiv:1911.03756](https://arxiv.org/abs/1911.03756)

N. Levenberg and M. **Perera**. A Global Domination Principle for  $P$ —Pluripotential Theory. *Complex Analysis and Spectral Theory, Contemporary Mathematics*, 743, 11-20.

2020

[arXiv:1806.06426](https://arxiv.org/abs/1806.06426)

## Conferences and Workshops

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### Midwestern Workshop on Asymptotic Analysis

Oct 2019

PURDUE UNIVERSITY

Fort Wayne, Indiana

- Poster presentation on "Transformation Rule Associated with  $P$ —Extremal Functions and Holomorphic Mappings"

### Graduate Students Mini Symposium – DAAD Partnership workshop

Apr 2013

INSTITUT TEKNOLOGI BANDUNG

Bandung, Indonesia

- Talk on "Valuation of Street Trees in Colombo, Sri Lanka"

### International Forum for Mathematical Modeling

Mar 2014

UNIVERSITY OF COLOMBO

Colombo, Sri Lanka

- Member of the Organizing Committee

### Joint Mathematics Meetings (JMM)

Jan 2020

COLORADO CONVENTION CENTER

Denver, Colorado

- Attended

### Midwestern Workshop on Asymptotic Analysis

Oct 2018

INDIANA UNIVERSITY

Bloomington, Indiana

- Attended

### Midwestern Workshop on Asymptotic Analysis

Oct 2017

INDIANA UNIVERSITY - PURDUE UNIVERSITY INDIANAPOLIS

Indianapolis, Indiana

- Attended

## Awards and Scholarships

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### IUB Provost's Travel Award for Women in Science

Nov 2019

INDIANA UNIVERSITY

Bloomington, Indiana

- Offered to attend the JMM 2020 in Denver, Colorado

### Grad Student Travel Grant

Nov 2019

AMERICAN MATHEMATICAL SOCIETY (AMS)

Providence, Rhode Island

- Offered to attend the JMM 2020 in Denver, Colorado

### **Hazel King Thompson Summer Reading Fellowship**

INDIANA UNIVERSITY

- Offered to support graduate scholarships in the Mathematics department

May 2019

Bloomington, Indiana

### **Indiana University Graduate Fellowship**

INDIANA UNIVERSITY

- Offered to support graduate scholarships

Jan 2015

Bloomington, Indiana

### **Dharmadasa Punchihewa Memorial Prize for Mathematics**

UNIVERSITY OF COLOMBO

- Awarded for the best performance in Mathematics

Oct 2010

Colombo, Sri Lanka

### **Mr. and Mrs. D. P. Epasinghe Memorial Gold Medal for Mathematics**

UNIVERSITY OF COLOMBO

- Awarded to the student who has shown the highest competence in Mathematics and having a First Class

Oct 2010

Colombo, Sri Lanka

### **The Gulamhusein A. J. Noorbai Gold Medal**

UNIVERSITY OF COLOMBO

- Awarded to the student who has shown the highest competence in Mathematics

Oct 2010

Colombo, Sri Lanka

### **Joseph Nalliah Arumugam Memorial Award**

UNIVERSITY OF COLOMBO

- Awarded to the student who has shown the highest competence in Final Examination in Science

Oct 2010

Colombo, Sri Lanka

### **The Studentship for the First Year Examination in Science**

UNIVERSITY OF COLOMBO

- Offered for the best performance in First Year Examination in Science

Aug 2007

Colombo, Sri Lanka

## **Memberships**

### **American Mathematical Society (AMS)**

MEMBER

Apr 2015 - Present

Providence, Rhode Island

## **Outreach and Service**

### **Math 1225 Course Coordinator**

DEPARTMENT OF MATHEMATICS, VIRGINIA TECH

Aug 2024 - Present

Blacksburg, Virginia

### **Transfer Evaluator**

DEPARTMENT OF MATHEMATICS, VIRGINIA TECH

Aug 2023 - Present

Blacksburg, Virginia

### **Member, Sri Lankan Student Association**

VIRGINIA TECH

Aug 2022 - Present

Blacksburg, Virginia

### **Common Time Exam Room Scheduler**

DEPARTMENT OF MATHEMATICS, VIRGINIA TECH

Jan 2022 - Present

Blacksburg, Virginia

### **Volunteer, IU Science Fest**

INDIANA UNIVERSITY

Oct 2015

Bloomington, Indiana

### **Treasurer, Sri Lanka Olympiad Mathematics Foundation**

UNIVERSITY OF COLOMBO

July 2013 - July 2014

Colombo, Sri Lanka

### **Member, Junior Faculty Monitoring Committee**

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF COLOMBO

May 2013 - July 2014

Colombo, Sri Lanka

### **Secretary, Departmental Meetings**

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF COLOMBO

Jan 2013 - July 2014

Colombo, Sri Lanka

**Course Coordinator, Undergraduate Mathematics Courses**

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF COLOMBO

*Jan 2012 - July 2014*

*Colombo, Sri Lanka*

**Member, Committee of Annual Board of Survey**

UNIVERSITY OF COLOMBO

*Dec 2012*

*Colombo, Sri Lanka*

**Organizer, 'MathQuiz - 2011'- Inter School Competition of Mathematics**

SRI LANKA ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (SLAAS) AND DEPARTMENT OF MATHEMATICS, UNIVERSITY OF COLOMBO

*Apr 2011*

*Colombo, Sri Lanka*

**Organizer, 'Star Quest - 2009'- All Island Inter School Astronomy Quiz Competition**

MATHEMATICAL AND ASTRONOMICAL SOCIETY, UNIVERSITY OF COLOMBO

*May 2009*

*Colombo, Sri Lanka*

**Organizer, All Island School Inventors' Competition**

SRI LANKA ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (SLAAS) AND THE MINISTRY OF EDUCATION

*Dec 2008*

*Colombo, Sri Lanka*