# NERANJAN MARASINGHE

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# Education

Texas Tech University

PhD student in Mathematics (Advisor : Prof. Alexander Solynin) GPA : 4.00/4.00

University of Peradeniya BSc in Electrical and Electronics Engineering GPA : 3.60/4.00

## **Research Interests**

Complex Analysis : Potential Theory, Symmetrization, Geometric Function Theory, Complex Dynamics

# EXPERIENCE

<b>Texas Tech University, Department of Mathematics and Statistics</b>	Lubbock, TX, USA
Graduate Part Time Instructor	Fall 2022-Fall 2023
Texas Tech University, Department of Mathematics and Statistics	Lubbock, TX, USA
Research Assistant	Summer 2022
Texas Tech University, Department of Mathematics and Statistics	Lubbock, TX, USA
Teaching Assistant	Fall 2021, Spring 2022
University of Peradeniya, Department of Engineering Mathematics	Peradeniya, Sri Lanka
Teaching Assistant	March 2019 - August 2021
Huawei Technologies (Pvt.) Ltd.	Colombo, Sri Lanka
Trainee Electrical and Electronics Engineer	Oct. 2017 - Jan. 2018
Milco (Pvt.) Ltd.	Ambewela, Sri Lanka
Trainee Electrical and Electronics Engineer	Oct. 2016 - Jan. 2017

# TEACHING

#### At Texas Tech University

- MATH 1321 Trigonometry(Fall 2022) https://www.youtube.com/playlist?list=PLTZv4jL4go4RQc1WdhkGj0S6BeAEtdJPQ
- MATH 1452 Calculus II (Spring 2023) https://www.youtube.com/playlist?list=PLTZv4jL4go4Q75HmF68qLb7Aq0r0UjlJ6
- MATH 3350 Higher Mathematics for Scientists and Engineers (Summer 2023) https://www.youtube.com/playlist?list=PLTZv4jL4go4S0VJdLFm0p4qdiPkFiqj9N
- MATH 1451 Calculus I (Fall 2023) https://www.youtube.com/playlist?list=PLTZv4jL4go4SiR4zn\_RIRFLHYoi8643H6

#### At University of Peradeniya

- GP 116 Linear Algebra (2019 Semester 02, 2020 Semester 02) https://www.youtube.com/watch?v=QRd-jd6j2rs&list=PLTZv4jL4go4QUKES6N30kgj0TXCjJuwut
- GP 115 Calculus I (2019 Semester 01, 2021 Semester 01)

Lubbock, TX, USA Aug 2021 - May 2026

Peradeniya, Sri Lanka Nov 2014 - Jan 2019

- EM 505 Complex Analysis (2021 Semester 02)
- EM 316 Numerical Methods for Electrical and Electronics Engineers (2019)
- EM 215 Numerical Methods (2020)

#### YouTube Teaching

• Complex Analysis https://www.youtube.com/playlist?list=PLTZv4jL4go4Ql6aZFDi1KxXj2LIRawbgt

# UNDERGRADUATE PROJECTS

• Smart Surveillance System for Child and Elderly Care (Undergraduate Final Year Research Project)

Supervisors: Dr.S.A.H.A. Suraweera, Prof. M.P.B. Ekanayake, Prof. G.M.R.I. Godaliyadda

• Wireless Sensor Based Automated Security System (This project was assigned in the third year of Undergraduate Studies)

## CURRENT RESEARCH

- During Fall 2022, I started to work on a problem introduced by G. Polya and G. Szego in their book "Isoperimetric Inequalities in Mathematical Physics" with my advisor. I have mentioned more details about my ongoing research in my research statement.
- Starting from Spring 2023, I have been working on a problem related to the product of conformal radii of open sets having a fixed area.

#### SCHOLARSHIPS, FELLOWSHIPS AND ACADEMIC AWARDS

• Dr. Shelby Hildebrand Graduate Math Fellowship - Texas Tech University (2023-2024)

#### Seminar Talks

- "Product of Conformal Radii of open sets having a fixed area" Analysis Seminar, Texas Tech University, April 24, 2023.
- "Product of Conformal Radii of open sets having a fixed area" Analysis Seminar, Texas Tech University, November 13, 2023.

#### References

- Prof. Alexander Solynin Department of Mathematics and Statistics, Texas Tech University, Texas, USA Office : MA 231 Email: alex.solynin@ttu.edu
- Dr. Rochana Meegaskumbura Department of Engineering Mathematics, University of Peradeniya, Sri Lanka Email: rochanam@pdn.ac.lk