Kanchana Ruwanpathirana

Graduate Student (PhD)



759 2nd Avenue Salt Lake City, Utah 84103



+1 (801) 433 7062



www.cs.utah.edu/~kanchana/



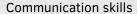
kanchana@cs.utah.edu

About me ——

I am a 3rd year grad student at the University of Utah currently enrolled in the PhD program at the School of Computing. I am aiming to leverage my knowledge of analytical methods, experimental design, research skills in the industry and expand my horizons. My research interests involve approximation algorithms for problems including online learning problems (such as online clustering) as well as problems such as matrix completion, principal component regression, weighted low-rank approximation and etc. Outside of the work, I'm also in to hiking and outdoor activities.

Skills —

Java, Python, C, C++



Problem solving

Modules -

University of Utah

Advanced Algorithms (A)

Data Mining (A)

Machine Learning (A)
Intro to Optimization (A)

University of Moratuwa, LKA

Distributed Systems (A) Operational Research (A)

Coursera

Machine Learning

(Credential ID: 2YFH5MTU2EK9) Computational Neuroscience (Credential ID: Q6GSNPCJYPBT)

Education

since 2018 Graduate Student (Ph.D.)

Current GPA: 4.0

Working with Prof. Aditya Bhaskara. Worked on projects in online learning and in principal component regression and matrix completion literature. Published a paper on online k-means clustering, at ALT 2020. A publication in submission for the matrix completion work at

AISTATS.

2014-2018 B.Sc. of Engineering

University of Moratuwa, Sri Lanka

School of Computing, University of Utah

Cumulative GPA: 4.09/4.20

Majored in Computer Science and Engineering

Publications

2021 Additive Error Guarantees for Weighted Low Rank Approximation

with Aditya Bhaskara and Pruthivi Maheskaya Wijewardena

In Submission

2020 Principal Component Regression with Semirandom Observations via

Matrix Completion

with Aditya Bhaskara and Pruthivi Maheskaya Wijewardena

Accepted to AISTATS 2021

2020 Robust Algorithms for Online k-means Clustering

with Aditya Bhaskara

Proceedings of the 31st International Conference on Algorithmic

Learning Theory

[Experience]

2018 Junior Consultant - University of Moratuwa, Sri lanka TA/Management

Primary job tasks involved TA work for undergraduate classes, assisting in management tasks and assisting in creating and managing

continuous assessments for incoming students

2016 Visiting Research Fellow - SUTD, Singapore ML in Music Research

Worked with Dr. Simon Lui from Singapore University of Technology and Design. Research project on recognizing emotions in music. Analysis of the mathematical model used in mapping acoustic feature space to emotional vector space and using ml techniques (i.e. SVM,

NN etc.) to model it in to a continuous domain

Awards

2017 NASA Space Apps 2017 Global Finalist

Member of Team Codon [global finalist in Galactic Impact Category]

2016 International Mathematics Competition for University Students (23rd

IMC) Bronze Medal

2012 International Mathematical Olympiad (53rd IMO) Certificate

Activities

2012-2020 Sri Lanka Olympiad Mathematics Foundation Volunteer Member

Was involved in managing the web applications, exam management and proctoring. Currently assisting in creating a exam management

system for the organization.

2016 Mathematics Society - Univeristy of Moratuwa, Sri Lanka Secretary

Involved in re-establishing the mathematics society and initiating a

series of weekly talks by members and invited lecturers.