Department of Statistics & Computer Science

Faculty of Science / University of Peradeniya



Prof. Amalka J. Pinidiyaarachchi

B.Sc. (Perad.), Ph.D. (Uppsala, Sweden)

Professor in Statistics & Computer Science

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About Me

Currently a Professor, Department of Statistics and Computer Science, University of Peradeniya. Graduated from the University of Peradeniya obtaining B.Sc. Special Degree in Computer Science in 2001 and joined the University in 2002 as a Probationary Lecturer. Proceeded to Uppsala University Sweden for postgraduate studies and completed the Ph.D. in 2009 in Computerized Image Analysis. My areas of expertise are in the fields of digital image processing and computer vision.

Higher Education Qualifications

PhD

Uppsala University
Sweden
(2009)

BSc

University of Peradeniya
Sri Lanka
(2001)

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Awards, Scholarships, Memberships & Fellowships

PGIS Research Grant 2020

Nature’s Secrets Research Award for Best Commercially Viable Research Project 2012

Swedish International Development Cooperation Agency (SIDA) scholarship for Postgraduate studies - 2004.

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Positions Held

- Member - Sir Ivor Jennings Endowment Trust, University of Peradeniya- (2022 -2024)
- Vice President - Standing Committee on Finance, Alumni Association University of Peradeniya- (2023)
- Chairperson, Board of Study in Statistics and Computer Science, Postgraduate Institute of Science- (June 2020 - December 2022)
- Vice President - Standing Committee on Finance, Alumni Association University of Peradeniya- (2021)
- Head, Department of Statistics and Computer Science- (April 2016 –April 2019)
- Director – Science Industry Interaction Cell, Faculty of Science, University of Peradeniya.- (April 2013 – August 2016)
- Member – University Web Development Sub Committee, University of Peradeniya- (2012 – To Date)
- Chairperson – Faculty Web Development Committee, Faculty of Science, University of Peradeniya- (2012 – to date)
- Coordinator – MSc in IT – Postgraduate Institute of Science, University of Peradeniya- (2016- to date)
- Member – Board of Study in Statistics and Computer Science – Postgraduate Institute of Science, University of Peradeniya- (2010 -to date)
- Faculty representative- Planning Committee, Staff Development Centre, University of Peradeniya- (2013 – to date)
- Coordinator , Faculty of Science- Management Committee, International Research Centre, University of Peradeniya- (2014 – to date)
- Member of teaching panel, Board of Study in Statistics and Computer Science, Postgraduate Institute of Science- (2010 – to date)
- Reviewer for Cytometry A- (2009 – to date)
- Reviewer for the Journal of the National Science Foundation- (2015 – to date)
- Coordinator – Postgraduate Diploma in IT – Postgraduate Institute of Science, University of Peradeniya. - (2011 – 2013)
- Treasurer – Alumni Association University of Peradeniya- (2016, 2017)
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My Teachings

- CS203: Database Management Systems
- CS313: Digital Image Processing
- CS314: Image Processing Practical
- CS408: Computer Vision
- CS421: Research Project
- CS423: Seminar
- CSC1041: Programming Laboratory I

Research Interests (Research Fields/ Projects)

Digital Image Processing, Computer Vision,
Biomedical Engineering, Cell Image Analysis, Pattern Recognition, Data Science

Ongoing Research and Projects

Identification and Classification of Brain Diseases Using Deep Learning on Neuroimaging Data

MPhil candidate: Ms. Subaramya Srivishagan (May 2020); Co-Supervisors: Dr. R. Nagulan , Dr. T. Kokul, University of Jaffna

An automated visual surveillance system for human detection

Primary objective of proposed system is to achieve robustness and high levels of accuracy whilst maintaining real-time performance when detecting and tracking multiple humans in high definition surveillance video. PhD Candidate : Mr. T. Kokul (PhD Completed in 2019); Co-Supervisors: Prof. C. Fookes. Prof. S. Sridharan, Image and Video Lab, SAIVT Program, Queensland University of Technology, Australia, Dr. A. Ramanan , Department of Computer Science, University of Jaffna

Analysis and enhancement of software complexity metrics

PhD candidate : Mr. D.I. De Silva (Upgraded 2019); Joint supervision with Prof. S.R. Kodituwakku, University of Peradeniya and Mr. N. Kodagoda, SLIIT.

Patent

A low-cost trajectory analysis system without attachments and performance evaluation method for athletes. Patent application processing. Application number LK/P/1/17269

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Key Publications

Psychiatry Research: Neuroimaging - (2023)

Discriminative patterns of white matter changes in Alzheimer's

IEEE Transactions on Information Forensics and Security - (2019)

Target-specific siamese attention network for real-time object tracking

Cytometry A. - (2009)

A detailed analysis of 3D subcellular signal localization.

Conferences

IEEE International Conference on Image Processing (ICIP) 2017

HELD AT : Beijing, China - (17th-20th September 2017)
TOPIC : *"Gate connected convolutional neural network for object tracking", T. Kokul, C. Fookes, S. Sridharan, A. Ramanan and* ***U. A. J. Pinidiyaarachchi***

2022 7th International Conference on Information Technology Research (ICITR)

HELD AT : Colombo, Sri Lanka - (7-9 Dec. 2022)
TOPIC : *Gender and Age Estimation From Facial Images using Deep Learning, Rajeetha Thaneeshan, Kokul Thanikasalam, Amalka Pinidiyaarachchi*

My Publications

Please goto the website.

https://sci.pdn.ac.lk/scs/staff/Amalka-Pinidiyaarachchi

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