



**Department of Statistics & Computer Science
Faculty of Science / University of Peradeniya**



Dr. Erunika O. Dayartna

B.Sc. (Perad.), Ph.D. (Keio, Japan)

Senior Lecturer

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Higher Education Qualifications

🎓 **PhD**

Keio University
Japan
(2015)

🎓 **BSc**

University of Peradeniya - Sri Lanka
(2010)

🎓 **BSc**

University of Peradeniya
Sri Lanka
(2010)

Awards, Scholarships, Memberships & Fellowships











Member of Internet Engineering Task Force (IETF)

Positions Held



Nothing to show under this subheading !!!






My Teachings

-  AS473: Advance Computer Networks
-  CS201: Data Structures
-  CS205: Computer Architecture
-  CS412: Mobile and Pervasive Computing
-  CS413: Data and Network Security
-  CS414: Software Project Management
-  SC414: Foundation to Computer Architecture
-  SC573: Computer Architecture



Research Interests (Research Fields/ Projects)

Computer Networks, Internet, Mobile Networks, Wireless Sensor Networks, Internet of Things, Mobile cloud computing, Network simulation, Software Defined Networks (SDN), Mobility protocols




Ongoing Research and Projects


-  **Middleware for computational offload for Mobile Computing**
-  **Autonomous System level topology mapping techniques**
-  **Implementation and comparison of wireless sensor network protocols**
-  **NS3 simulation of wireless sensor networks**
-  **Smart Surveillance Systems**

Key Publications

-  IEICE Transactions on Information and Systems - (2015)
Intra-AS performance analysis of distributed mobility management schemes,
-  IEICE Transactions on Communications - (2014)
Impact of multiple home agents placement in mobile IPv6 environment,

Conferences

-  **8th International Conference on Mobile Computing and Ubiquitous Networking (ICMU 2015)**
HELD AT : Institute of Electrical and Electronics Engineers Inc. - (2015 Mar 13)
TOPIC : "*Performance evaluation of host-based mobility management schemes in the internet*", **Erunika, O.**, Kaneko, K. & Teraoka, F.,
-  **Proceedings of 2013 IEEE 37th Annual Computer Software and Applications Conference (COMPSAC)**
- (July 2013)
TOPIC : "*Multiple Home Agent Placement Considerations Based on Internet Service Provider Perspective in mobile IPv6*", **O. Erunika**, K. Kaneko, and F. Teraoka,
-  **6th SLIIT research Symposium 2011**

TOPIC : "*Toward the Optimization of Master Worker Approach in Grid Computing*", **H. R. O. E. Dayarathne** and S. R. Kodituwakku,
-  **Peradeniya Research Sessions (PURSE), Sri Lanka**
HELD AT : University of Peradeniya, SL - (December 2010)
TOPIC : "*Toward the Optimization of Master Worker Approach in Grid Computing (abstract)*", **H. R. O. E. Dayarathne** and S. R. Kodituwakku,

My Publications

Please goto the website.

<https://sci.pdn.ac.lk/scs/staff/Erunika-Dayaratna>