



**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>