Ampalavanapillai Nirmalathas

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Professor Ampalavanapillai Nirmalathas

+61 3 83445789

nirmalat@unimelb.edu.au

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Room: Level: 04 Room: 4.4

Building: Electrical and Electronic Engineering

Campus: Parkville

RESEARCH INTERESTS

BIOGRAPHY

Professor Thas (Ampalavanapillai) Nirmalathas

Thas Nirmalathas is a Professor of Electrical and Electronic Engineering. He is also the Head of Electronic and Photonic Systems Research Group at the Department of Electrical and Electronic Engineering, The University of Melbourne.

Prof Nirmalathas obtained his BEng and PhD in Electrical and Electronic Engineering from the University of Melbourne in 1993 and 1998 respectively. Between 2000 and 2004, he was the Director of Photonics Research Laboratory (Melbourne Node of Australian Photonics CRC) and also the Program Leader of Telecommunications Technologies Program. From 2004 to 2006, he was the Program Leader for the Network Technologies Research Program in NICTA. He was also the acting Lab Director of VRL in 2007. Between 2006 and 2008, He was the Research Group Manager of the Networked Systems Group of Victoria Research Laboratory (VRL) at the National ICT Australia (NICTA), a premier Australian research centre of excellence in ICT. Between 2010 and 2012, he was the Head, Department of Electrical and Electronic Engineering at the University of Melbourne. In 2012, he co-founded the Melbourne Accelerator Program (MAP http://themap.co) to support the entrepreneurial activities of the University Community through business acceleration methodologies and was the director of MAP until 2015. He was the Director of Networked Society Institute between 2014 and 2019 and provided leadership to the institute. Networked Society Institute was a catalyst in supporting interdisciplinary research tackling societal challenges through exploration of connectivity between people, places and things.

His research interests include microwave photonics, optical-wireless network integration, broadband networks, and scalability of telecom and Internet services.

He has serviced as chair of steering committees of Asia Pacific Microwave Photonics and IEEE Topical Meeting on Microwave Photonics Conference series in 2008/2009. He is also a member of the Steering Committee for the International Conference on Optical Internet (COIN). He was also Guest Editor for Special Issue on Opto-Electronics and Communications of the IEICE Transactions in Communications. He was the General Co-Chair of 2008 IEEE Topical Meeting on Microwave Photonics/ Asia Pacific Microwave Photonics 2008. He is currently an Associate Editor of IEEE/OSA Journal of Lightwave Technology. He is a Senior Member of IEEE and the Optical Society of America, and a Fellow of the Institution of Engineers Australia.

RECENT PUBLICATIONS

4. Yan M, Chan C, Gygax A, Yan J, Campbell L, Nirmalathas A, Leckie C. Modeling the Total Energy Consumption of Mobile Network Services and Applications. *ENERGIES*. MDPIAG. 2019, Vol. 12, Issue 1. DOI: 10.3390/en12010184 (https://dx.doi.org/10.3390/en12010184)

5. Gouhier B, Lee K, Nirmalathas A, Lim C, Skafidas E. Optical comb-based, wide bandwidth hybrid electro-optic probing system. *Proceedings 2015 European Conference on Lasers and Electro-Optics - European Quantum Electronics Conference, CLEO/Europe-EQEC 2015*. 2019, Vol. Part F4-CLEO 2015.

6. He X, O'Keefe N, Sun D, Liu Y, Uddin H, Nirmalathas A, Rajasekharan Unnithan R. Plasmonic Narrow Bandpass Filters Based on Metal-Dielectric-Metal for Multispectral Imaging. *2018 Conference on Lasers and Electro-Optics Pacific Rim, CLEO-PR 2018*. 2019, Vol. Part F113-CLEOPR 2018.

7. Ranaweera C, Wong E, Nirmalathas A, Jayasundara C, Lim C. 5G C-RAN With Optical Fronthaul: An Analysis From a Deployment Perspective. *JOURNAL OF LIGHTWAVE TECHNOLOGY*. IEEE - Institute of Electrical and Electronic Engineers. 2018, Vol. 36, Issue 11. DOI: 10.1109/JLT.2017.2782822 (https://dx.doi.org/10.1109/JLT.2017.2782822)

8. Wang K, Nirmalathas A, Lim C, Wong E, Alameh K, Li H, Skafidas E. 80 Gb/sFree-Space Reconfigurable Optical Interconnects with Carrierless-Amplitude-Phase Modulation and Space-Time Block Code. *2018 OPTICAL FIBER COMMUNICATIONS CONFERENCE AND EXPOSITION (OFC)*. IEEE. 2018, Vol. Part F84-OFC 2018. DOI: 10.1364/OFC.2018.M2K.6 (https://dx.doi.org/10.1364/OFC.2018.M2K.6)

9. Jurado Lasso F, Clarke K, Nirmalathas A. A Software-Defined Networking framework for IoT based on 6LoWPAN. *2018 WIRELESS TELECOMMUNICATIONS SYMPOSIUM (WTS)*. IEEE. 2018, Vol. 2018-April. DOI: 10.1109/WTS.2018.8363938 (https://dx.doi.org/10.1109/WTS.2018.8363938)

10. Liu Y, Ranaweera C, Lim C, Guo L, Nirmalathas A, Wong E. Convergence of 5G RAN and Optical Access: A Coordinated Resource Allocation Framework. *2018 ASIA COMMUNICATIONS AND PHOTONICS CONFERENCE (ACP)*. IEEE. 2018, Vol. 2018-October. DOI: 10.1109/ACP.2018.8595806 (https://dx.doi.org/10.1109/ACP.2018.8595806)

11. Song T, Wang K, Nirmalathas A, Lim C, Wong E, Alameh K. Demonstration of Indoor Optical Wireless Communications with Spatial Diversity Using Repetition-Coding and Space-Time-BlockCoding. *23rd Opto-Electronics and Communications Conference (OECC)*. IEEE. 2018. DOI: 10.1109/OECC.2018.8729692 (https://dx.doi.org/10.1109/OECC.2018.8729692)

12. Tian Y, Lee K, Lim C, Nirmalathas A. Demonstration of Non-Orthogonal Multiple Access Scheme using Multilevel Coding without Successive Interference Cancellation with 60 GHz Radio-over-Fiber Fronthaul. *2018 OPTICAL FIBER COMMUNICATIONS CONFERENCE AND EXPOSITION (OFC)*. IEEE. 2018, Vol. Part F84-OFC 2018. DOI: 10.1364/OFC.2018.TU3J.4 (https://dx.doi.org/10.1364/OFC.2018.TU3J.4)

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