

# Associate Professor Waleed H Abdulla

*BSc, MSc, PhD*



**Associate Professor**

**In:** [Department of Electrical, Computer and Software Engineering](#) » [Faculty of Engineering](#)

## Biography

**Waleed H. Abdulla** holds a PhD Degree from the University of Otago, New Zealand. He is an Associate Professor in the University of Auckland. He was the Vice President- Member Relations and Development (APSIPA) for two terms. He has been a Visiting Researcher/Collaborator with Tsinghua University, Siena University (Italy), Essex University (UK), IDIAP (Switzerland), TIT (Japan), ETRI (Korea), HKPU (Hong Kong). He has published more than 150 refereed publications. He is member of Editorial Boards of six journals. He supervised over 25 postgraduate students. He is a recipient of many awards and funded projects exceeding \$1M and was awarded JSPS, ETRI, and Tsinghua fellowships. He received Excellent Teaching Awards for 2005 and 2012. He is a Member of APSIPA and Senior Member of IEEE.

## Research | Current

Human Biometrics  
Signal and Speech Processing  
Speaker Recognition  
Active Noise Control  
Biosignal Processing  
Parametric Acoustic Speakers  
Speech Enhancement  
Hyperspectral Imaging to Quantify Food Quality  
Audio Watermarking

## Teaching | Current

Signal Processing, Circuits and Systems, Human Biometrics

## Responsibilities

Deputy Head of Department (Academic)

## Areas of expertise

His research interest: Human Biometrics, Narrow Sound Beam Projection, Hyperspectral Imaging Applications, Speech and Signal Processing, and Active Noise Control

## Selected publications and creative works (Research Outputs)

- Noviyanto, A., & Abdulla, W. (2017). Honey dataset standard using hyperspectral imaging for machine learning problems. *25th European Signal Processing Conference EUSIPCO 2017*, 503-507. Kos Island, Greece: IEEE. [10.23919/EUSIPCO.2017.8081252](https://doi.org/10.23919/EUSIPCO.2017.8081252)  
URL: <http://hdl.handle.net/2292/41270>  
Other University of Auckland co-authors: [Ary Noviyanto](#)
- Chalakkal, R., & Abdulla, W. (2017). Automatic segmentation of retinal vasculature. *2017 IEEE International Conference on Acoustics, Speech and Signal Processing Proceedings*, 886-890. New Orleans, LA, USA: IEEE. [10.1109/ICASSP.2017.7952283](https://doi.org/10.1109/ICASSP.2017.7952283)  
URL: <http://hdl.handle.net/2292/35175>  
Other University of Auckland co-authors: [Renoh Johnson Chalakkal](#)
- Bao, F., & Abdulla, W. H. (2016). A noise masking method with adaptive thresholds based on CASA. *2016 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference, APSIPA 2016*, 232-236. Jeju, South Korea: IEEE. [10.1109/APSIPA.2016.7820880](https://doi.org/10.1109/APSIPA.2016.7820880)
- Lin, Y., & Abdulla, W. H. (2015). *Audio watermark: A comprehensive foundation using MATLAB*. Springer. Pages: 199. [10.1007/978-3-319-07974-5](https://doi.org/10.1007/978-3-319-07974-5)
- Ardekani, I. T., & Abdulla, W. H. (2014). Active noise control in three dimensions. *IEEE Transactions on Control Systems Technology*, 22 (6), 2150-2159. [10.1109/TCST.2014.2301457](https://doi.org/10.1109/TCST.2014.2301457)  
Other University of Auckland co-authors: [Iman Ardekani](#)
- Tabatabaei Ardekani, I., & Abdulla, W. H. (2014). Adaptive signal processing algorithms for creating spatial zones of quiet. *Digital Signal Processing: A Review Journal*, 27 (1), 129-139. [10.1016/j.dsp.2014.01.001](https://doi.org/10.1016/j.dsp.2014.01.001)  
Other University of Auckland co-authors: [Iman Ardekani](#)
- Ardekani, I. T., Abdulla, W. H., & Rehman, S. U. (2014). *Remote FxLMS Algorithm for Active Control of Sound in Remote Locations*. Paper presented at Annual Summit and Conference of Asia-Pacific-Signal-and-Information-Processing-Association (APSIPA), Angkor, CAMBODIA. 9 December - 12 December 2014. 2014 ASIA-PACIFIC SIGNAL AND INFORMATION PROCESSING ASSOCIATION ANNUAL SUMMIT AND CONFERENCE (APSIPA). (pp. 5).
- Krivokuca, V., Abdulla, W., & Swain, A. (2013). A non-invertible cancellable fingerprint construct based on compact minutiae patterns. *International Journal of Biometrics*, 6 (2), 125-142. [10.1504/IJBM.2014.060977](https://doi.org/10.1504/IJBM.2014.060977)  
Other University of Auckland co-authors: [Akshya Swain](#)

## Identifiers

<http://orcid.org/0000-0002-1812-4285>

## Contact details

[+64 9 923 8969](tel:+6499238969)

[w.abdulla@auckland.ac.nz](mailto:w.abdulla@auckland.ac.nz)

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## Primary office location

BUILDING 903 - Bldg 903  
Level 4, Room 422  
262 KHYBER PASS  
NEWMARKET  
AUCKLAND 1023  
New Zealand



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