

# Wanli Xue

## Curriculum Vitae

### Education

- Mar. 2015 – **University of New South Wales (UNSW), Australia.**
  - Now Ph.D. candidate, Computer Science & Engineering,  
**Advisor:** *Prof. Aruna Seneviratne and Dr. Wen Hu*  
**Dissertation:** *"Privacy-preserving Internet of Things Analysis Architecture."*
- June. 2011 – **University of Tasmania, Australia.**
  - Dec. 2013 M.Sc., Computer Science,  
**Advisor:** *Prof. Byeong Kang*  
**Dissertation:** *"Arduface: An Embedded System Analysis Tool."*
- Sep. 2007 – **University of Tasmania, Australia & Shanghai Ocean University, China.**
  - Jul. 2011 B.Sc., Computer Information System; B.Bm., Business Information System

### Awards and Honors

- March 2017 **IEEE&ACM IPSN Student Travel Award**, IEEE&ACM IPSN 2017.
- March 2017 **PRSS Conference Travel Fund**, UNSW.
- 2015 – 2018 **Australian Postgraduate Award**, Australia.
- 2015 – 2018 **Research Project Top-up Scholarship**, NICTA.
- June 2012 **Golden Key International Honour Society**, *Top 15% Students Invited*, Worldwide.
- 2011 – 2013 **Postgraduate Scholarship**, UTAS.

### Research Experience

- Mar. 2015 – **Networks Research Group.**
  - Now DATA61 (formerly National ICT Australia), CSIRO, Sydney, Australia  
*Ph.D. Research Assistant*
- Mar. 2013 – **Smart Services and Systems research group.**
  - Feb. 2015 Department of Computer Science, UTAS, Hobart, Australia  
*Postgraduate Research Assistant*

### Teaching Experience

- 2017,2018 S1 **Tutor for BIOM9450: Clinical Information System.**
  - School of Biomedical Science & Engineering, UNSW  
Lecturer in Charge: Scientia Professor Nigel Lovell.

- 2016,2017 **Supervise Undergraduates.**
- School of Computer Science & Engineering, UNSW
- Andrew Peacock with thesis titled: Benchmarking for different privacy-preserving systems.
- Albert Kerr with thesis titled: Privacy-preserving cloud services for Internet of Things.

## --- Publications

### Journal

- J.1 Q. Yang, Y. Shen, F. Yang, J. Zhang, W. Xue, and H. Wen, "*HealCam: Energy-efficient and privacy-preserving human vital cycles monitoring on camera-enabled smart devices*," **Elsevier Computer Networks**.
- J.2 W. Xue, Y. Shen, C. Luo, W. Hu, and A. Seneviratne, "*Toward Privacy-preserving Edge-based Classification with Differential Privacy*," **Submitted to ACM Transactions on Internet of Things**.
- J.3 C. Luo, X. Liu, W. Xue, Y. Shen, J. Li, W. Hu, and Alex X. Liu, "*Predictable Privacy-Preserving Mobile Crowd Sensing: A Tale of Two Roles*," **Submitted to IEEE/ACM Transactions on Networking**.

### Conference Proceedings

- C.1 W. Xue, D. Vatsalan, W. Hu and A. Seneviratne, "*Sequence Data Matchings and Beyond: New Privacy-preserving Primitives based on Bloom Filters*," In (submitting) Targeting Rank A security conference.
- C.2 W. Xue, Y. Shen, W. Hu, and A. Seneviratne, "*Acies: A Privacy-Preserving System for Edge-based Classification*," In The 17th IEEE International Conference On Trust, Security And Privacy In Computing And Communications (**Trustcom**), April 2018. ( ERA Rank A)
- C.3 W. Xue, C. Luo, G. Lan, R. Rana, W. Hu, and A. Seneviratne, "*Kryptein: A Compressive-Sensing-Based Encryption Scheme for the Internet of Things*," In ACM/IEEE International Conference on Information Processing on Sensor Networks (**IPSN**), April 2017. (Acceptance rate: 19/104=18% ERA Rank A\*)
- C.4 W. Xue, H. Chung, SC. Han, Y. Kim, and BH. Kang, "*Arduface: An Embedded System Analysis Tool*," In Pacific Rim International Conference on Artificial Intelligence (**PRICAI**), Dec 2014. (ERA Rank B)

### Poster & Demo Abstract

- A.1 W. Xue, C. Luo, R. Rana, W. Hu and A. Seneviratne, "*CScript: A Compressive-Sensing-Based Encryption Engine for the Internet of Things: Demo Abstract*," In Proceedings of the 14th ACM Conference on Embedded Network Sensor Systems (**Sensys**), Now 2016.

## Professional Activities

### Review Service for Journal

- o IEEE Access

### External Review Service for Conference

- o 2018: IEEE ICDCS ,ACM/IEEE IPSN
- o 2017: ACM SenSys, IEEE LCN, ACM/IEEE IoTDI
- o 2016: ACM SenSys

## Presentations

### Conference Presentations

- o “*Kryptein: A Compressive-Sensing-Based Encryption Scheme for the Internet of Things*,”  
Oral Presentation at IEEE&ACM IPSN'17, Pittsburgh, Pennsylvania, USA, April 2017.
- o “*CScript: A Compressive-Sensing-Based Encryption Engine for the Internet of Things*,”  
Demo Presentation at IEEE Sensys'16, Stanford, CA, USA, November 2016.

## References

### Dr. Wen Hu

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### Dr. Aruna Seneviratne

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