Tae-Hoon Kim

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Professional Preparation

Oklahoma State University	Mechanical Engineering	B.S., 1997
University of Colorado, Boulder	Interdisciplinary Telecommunications	M.S., 2002
University of Pittsburgh	Information Science	Ph.D., 2010

Professional Appointments

July 1, 2017 – Associate Professor, Department of Computer Information Technology and Graphics, Purdue University Northwest, Indiana
August 13, 2011 – June 30, 2017 Tenure Track Assistant Professor, Department of Computer Information Technology and Graphics, Purdue University Northwest, Indiana

Publications

1. **Kim, T. H.,** Calix, R., and Patel, D., "Low cost system for laboratory-based course in IT Education using Raspberry Pi", 126th ASEE Annual Conference, June 2019.
2. Jin, G., Tu, M., **Kim, T.**, Heffron, J., White, J., Trekles, A., "Development and Evaluation of Cybersecurity Education Games for High School Students", International Journal of Engineering Research & Innovation. 10(1), 25-35. ISSN: 2152-4157, 2018
3. Jin, G., Tu, M., **Kim, T.**, Heffron, J., White, J., "Evaluation of Game-Based Learning in Cybersecurity Education for High School Students", Journal of Education and Learning (EduLearn). 12(1), 150-158. ISSN: 2089-9823, 2018.
4. Jin, G., Tu, M., **Kim, T.**, Heffron, J., White, J., "Game based Cybersecurity Training for High School Students", In Proceedings of the 49th ACM Technical Symposium on Computer Science Education (SIGCSE '18). ACM, New York, NY, USA, 68-73, 2018 (https://dl.acm.org/citation.cfm?id=3159591)
5. **Kim, T. H.,** Mapa, L., and Jun, M. H., "Framework to develop the customized tool for RFID experiment", 125th ASEE Annual Conference, June 2018.
6. Natonski, L., Hadden, B., and **Kim, T.H.**, "The Effect of Relay Node and Power Control on Performance in Multi-hop Wireless Network", 4th National Workshop for REU Research in Networking and System in *IEEE* MASS, 2017.
7. **Kim, T. H.,** Mapa, L., Ramaurthy, D., and Goni, F., "Investigating the Effect of Temperature in RFID Technology", 124th ASEE Annual Conference, June 2017.
8. **Kim, T. H.**, Fitzgerald, M., and Kurale, M., "The Optimal Receiving Signal Strength to Use the Relay Node in Wireless Network", 124th ASEE Annual Conference, June 2017.
9. **Kim, T.**, & Jiang, K., & Rajput, V. S., "Adoption of Container-Based Virtualization in IT Education", ASEE Annual Conference & Exposition, New Orleans, Louisiana. 10.18260/p.26530, June 2016.
10. **Kim, T. H.**, Tipper, D., & Krishnamurthy, P., "Improving the Performance of Multi-Hop Wireless Networks by Selective Transmission Power Control", *Journal of Information and Communication Convergence Engineering*, *13*(1), 7-14, 2015.

11. Kim, J.-K., Sohn, W.-S., **Kim, T.-H.**, and Lee, Y., "Area Correction for Annotation Interface of Touch Tablets", *An International Interdisciplinary Journal: Information*, 2014.
12. **T.-H. Kim**, D. Tipper, and P. Krishnamurthy, "Localized Algorithm to Improve Connectivity and Topological Resilience of Multi-hop Wireless Networks", Journal of Information and Communications Convergence Engineering, Vol. 11, No. 2, June 2013.
13. J-K. Kim, W.-S. Sohn, **T.-H. Kim**, and Y. Lee, "Annotation-based Smart User interface for Digital Textbook", International Conference on Advanced Information Technology and Sensor Application (AITS), 2012.
14. **Kim, T. H.**, Tipper, D., & Krishnamurthy, P. (2011, June). Improving the Connectivity of Heterogeneous Multi-Hop Wireless Networks. In *International Conference on Communications (ICC), 2011 IEEE* (pp. 1-6). IEEE.
15. T.-H. Kim, D. Tipper, P. Krishnamurthy, and L. Swindlehurst, "Improving the Topological Resilience of Mobile Ad Hoc Networks", Design of Reliable Communication Networks (DRCN), 2009.
16. T.-H. Kim, D. Tipper, and P. Krishnamurthy, "Connectivity and Critical Point Behavior in Mobile Ad hoc Sensor Networks", IEEE Symposium on Computers and Communications (ISCC), 2009.
17. T. Hayajneh, P. Krishnamurthy, D. Tipper, and T.-H. Kim, "Detecting Malicious Packet Dropping in the Presence of Collisions and Channel Errors in Wireless Ad hoc Networks", IEEE International Conference on Communications (ICC), 2009
18. T.-H. Kim and C.-K. Lin, "Network Lifetime Evaluation in Wireless Sensor Networks: Case Study", International Telecommunications Education and Research Association (ITERA), 2007.

Professional Activities

1. NSA GenCyber Summer Camp at Purdue University Northwest, 03/2018-03/2019, $98,156, PI
2. Industry grant from Mittal Steel Company, 2014-2016, $23,200, PI
3. Purdue University Northwest, Interdisciplinary Grants: Developing a Smart Manufacturing Security Research Program at PNW, 2018-2019, $19,885, Co-PI
4. NSA GenCyber Summer Camp at Purdue University Northwest, 03/2017-03/2018, $96,260, Co-PI
5. NSF SFS Capacity Building: Expanding the Pipeline: Immersive Learning Curriculum Development for High School Cybersecurity Education. DGE1723666, 08/2017-07/2020, $482,926, Co-PI.
6. NSA GenCyber Summer Camp at Purdue University Northwest. 03/2016-03/2017, $88,208, Senior Personnel.
7. NSF REU Site: Sustained Wireless Communication, 2/01/2015-1/31/2018, $325,651, Senior Personnel.
8. Purdue Research Foundation Summer Grant, 06/2019-08/2019, $8,000, PI.
9. Purdue Research Foundation Summer Grant, 06/2012-08/2012, $8,000, PI.
10. Conference Program committee of International Research Experience for Undergraduates Research in Networking and Systems (REUNS, 2015), Workshop on Wireless Sensor, Acuator, and Robot Networks (WiSARN 2012, 2013) and International Conference on Computing, Networking, and Communications (ICNC 2012 - 2014).
11. Panelist in SMART (Science, Mathematics & Research for Transformation) scholarship, part of the National Defense Education Program 2017-2018.
12. Guest Editor of SCOPUS Journal and Reviewer: *American Society of Engineering Education* (*ASEE, 2016-2018*), *The Technology Interface Internal Journal* (*TIIJ, 2016-2018*), *International Conference on Computer and Applications* (*CCA 2012*), *IEEE Communications Letter 2012, International Conference on Computing, Networking and communications* (*ICNC*

2012-2017), *IEEE Symposium on Wireless Technology & Applications* (*TSWTA 2012*), *Journal on Ad Hoc & Sensor Wireless Network* (*AHSWN 2012-2014*), *EURASIP Jounal on Wireless Communications and Networking 2011, International Teletraffic Congress* (*ITC 2011*), *IEEE International Conference on Communications System* (*ICCS, 2008*), *ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems* (*MSWiM, 2005*).