Assistant Professor Prapun Suksompong, Ph.D.

prapun@siit.tu.ac.th • www.prapun.com

CURRENT ADDRESS:
School of Information, Computer and Communication Technology (ICT)
Sirindhorn International Institute of Technology (SIIT) at Bangkadi
131 Moo 5, Tiwanond Road
Mueang, Pathum Thani 12000, Thailand
Tel. +66 (0) 2501 3505~20 Ext 5013

EDUCATION

Cornell University, Ithaca, New York

Doctor of Philosophy in Electrical and Computer Engineering (ECE), Aug 2008.
GPA: 4.24/4.00. Minor in Mathematics.

Master of Science in ECE, Jan 2006.
GPA: 4.24/4.00. Minor in Mathematics.

Bachelor of Science in ECE, Summa Cum Laude, May 2002.
GPA: 4.27/4.00.

HONORS & AWARDS

Thammasat University **Outstanding Young Researcher Award** (รางวัลนักวิจัยรุ่นใหม่ดีเด่นระดับคณะ ประเภทอาจารย์) 2013

SIIT **Research Award** for the Academic Year 2011

SIIT **Best Teaching Award** for the Academic Year 2009

Teaching Assistant of the Year by IEEE student branch 2005-06 for exemplary teaching in ECE.

2002-2003 recipient of Fellowship from Cornell University.

Graduated **Summa Cum Laude** from Cornell University in 2002.
Ranked 1st in engineering class.

Member of the Electrical and Computer Engineering Honor Society Eta Kappa Nu.

1997-2002 recipient of the **King's Scholarship** from the Thai Government.

WORK EXPERIENCE

Assistant Professor, Sirindhorn International Institute of Technology (SIIT), Thammasat University, Thailand

Mathematics I	Summer/2008
Digital Circuits	1/2009
Basic Electrical Engineering	2/2009, 1/2010, 1/2013
Mobile Communications	2/2009-2012
Probability and Random Processes	1/2010-2013
Principles of Communications	1/2011-2012
Engineering Statistics	2/2011
Basic Electrical Engineering Lab	2/2008-2013
Applied Physics II (Magnetism)	2/2012
Digital Communication Systems	1/2013
Computer Applications for Engineers	2/2013

Teaching Assistant, Cornell University, Ithaca, NY — Fall 2003 – Spring 2008

Research Assistant, Cornell University, Ithaca, NY — Fall 2004 and Spring 2005
Supported by National Academies Keck Futures Initiative (NAKFI), USA.

RESEARCH AREA

Wireless communication (การสื่อสารไร้สาย), digital communication theory (ทฤษฎีการสื่อสารแบบดิจิตอล), neuro-informational theory (ประสาทวิทยาศาสตร์เชิงทฤษฎีข้อมูล), Poisson process and Poisson convergence (การลู่เข้าสู่กระบวนการสุ่มแบบปัวส์ซอง), computation neuroscience (ประสาทวิทยาศาสตร์เชิงการคำนวณ), probability theory (ทฤษฎีความน่าจะเป็น)

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CONTRACTED RESEARCH SUPPORT

"Physical Layer OFDMA Based Wireless Communication Systems", Source: Telecommunications Research and Industrial Development Institute (TRIDI), NTC.

"Development of Research Laboratory for Center of Excellence in Wireless Communication, Network and Application Research", Source: TRIDI, NTC.

"Multidimensional Signal Processing for Multiuser Wireless Access", Source: TRIDI, NTC.

"Center for Intelligent Informatics," Source: National Research University (NRU) Project of Thailand's Office of the Higher Education Commission (OHEC)

JOURNAL PAPERS

T. Bamrungkitjaroen, P. Suksompong, and C. Charoenlarpnopparut, "*Application of a Pipelining Technique in Concatenated Tomlinson Harashima Precoder for Downlink Multiuser MIMO Systems*," Thammasat International Journal of Science and Technology, Volume 17, No. 2, pp. 1-12, April-June 2012

P. Kanjanavirojkul, K. Keeratishananond, P. Suksompong, "*Implementation of SU-MIMO and MU-MIMO GTD-system under imperfect CSI knowledge*," World Academy of Science, Engineering and Technology 76 (2011), pp. 473-477

P. Suksompong and T. Berger, "*Capacity Analysis of Neurons with Descending Action Potential Thresholds*", Information Theory, IEEE Transactions on , vol.56, no.2, pp.838-851, Feb. 2010 (ISI/ Impact: 2.725 (2010))

CONFERENCE PAPERS

Md. Mizanur Rahman, Chalie Charoenlarpnopparut, Prapun Suksompong, and Attaphongse Taparugssanagorn, "*Autocorrelation – MTM: A Compound Detector for Spectrum Hole Identification in Low SNR*", Proceedings of the 2013 International Conference on Electrical Communication and Information Technology (ECIT 2013), KUET, Khulna, Bangladesh, February 13-15, 2014.

Md. Mizanur Rahman, Chalie Charoenlarpnopparut, Prapun Suksompong, and Attaphongse Taparugssanagorn, "*Spectrum Hole Identification in Multiple TV bands by Adaptive Threshold Multi-Taper Spectrum Estimator for Cognitive Radio*", Proceedings of the 2013 International Conference on Electrical Communication and Information Technology (ECIT 2013), KUET, Khulna, Bangladesh, February 13-15, 2014.

Kavin Yongvanit, Prapun Suksompong, Attaphongse Taparugssanagorn, Chalie Charoenlarpnopparut, and Kazuhiko Fukawa, Performance Analysis of Iterative Max-Sum-Rate Algorithm in Massive MIMO Systems, Proceedings of the International Conference on Information and Communication Technology for Embedded Systems (ICICTES 2014), Ayutthaya, Thailand, January 23-25, 2014

T. Sangyam, P. Suksompong and C. Charoenlarpnopparut, "*Capacity Maximization via Selection of Uniformly Distributed User for Uplink MIMO Communication over η-μ Fading Channel*", Proceedings of The Second Asian Conference on Information Systems (ACIS 2013), Phuket Thailand, Oct. 31-Nov. 2, 2013

Theerawat Kiatdarakun, Prapun Suksompong, Chalie Chareonlarpnopparut, and Attaphongse Taparugssanagorn, "*3-D Localization Algorithm Using Double-Planar Passive RFID Arrays*", Proceedings of The 13th International Symposium on Communications and Information Technologies (ISCIT 2013), Samui Island, Thailand, Sep. 4-6, 2013.

Thitipong Sansanayuth, Prapun Suksompong, Chalie Chareonlarpnopparut, and Attaphongse Taparugssanagorn, "*RFID 2D-Localization Improvement using Modified LANDMARC with Linear MMSE Estimation*", Proceedings of The 13th International Symposium on Communications and Information Technologies (ISCIT 2013), Samui Island, Thailand, Sep. 4-6, 2013.

P. Hanpinitsak, C. Charoenlarpnopparut, S. Thananchai, and P. Suksompong, "*2D MIMO-OFDM channel model with 2D interleaver*", The International Conference on Information and Communication Technology for Embedded Systems (ICICTES 2013), January 24-26. 2013.

A. Aksornsart and P. Suksompong. "*Performance gain of antenna selection for MRC over η-μ SIMO fading channel*", Proceedings of the International Conference on Information and Communication Technology for Embedded Systems (ICICTES 2013), January 24-26. 2013.

T. Kiatdarakun and P. Suksompong, "*Entropy Rate of Thai Text and Testing Author Authenticity Using Character Combination Distribution*," Proceedings of the Second International Conference on Digital Information and Communication Technology and its Applications (DICTAP 2012), pp. 492-497, Thailand, May 16-18, 2012

T. Kiatdarakun and P. Suksompong, "*Testing Author Authenticity Using Character Combination Distribution*," The 2012 First ICT International Senior Project Conference (ICT-ISPC 2012), Nakhon Pathom, Thailand, April 20, 2012

T. Bamrungkitjaroen, P. Suksompong, C. Charoenlarpnopparut, K. Kaemarungsi, and K. Fukawa, "*Application of Pipelining Technique in Concatenated Tomlinson Harashima Precoder for Downlink Multiuser MIMO Systems*," Proceedings of the International Conference on Information and Communication Technology for Embedded Systems 2012 (ICICTES 2012), Bangkok, Thailand, March 22-24, 2012

T. Sangyam, C. Charoenlarpnopparut, P. Suksompong, K. Kaemarungsi, and K. Fukawa, "*Performance of Uplink Multi-User MIMO WiFi with Capacity Maximizing User Selection and Uniformly Distributed User Locations*," Proceedings of the International Conference on Information and Communication Technology for Embedded Systems 2012 (ICICTES 2012), Bangkok, Thailand, March 22-24, 2012

N. Jira-aroon, N. Promdontree, and P. Suksompong, "*On the Effect of Subcarrier Initial Location in SC-FDMA with Localized FDMA Mapping*," Proceedings of the International Conference on Information and Communication Technology for Embedded Systems 2012 (ICICTES 2012), Bangkok, Thailand, March 22-24, 2012

T. Bamrungkitjaroen, P. Suksompong, C. Charoenlarpnopparut, K. Sripimanwat, and K. Fukawa, "*Application of Pipelining Technique in Concatenated Tomlinson Harashima Precoder for Downlink MIMO Systems*", Proceedings of the Asia Simulation Conference 2011 (AsiaSim 2011), Seoul, Korea, November 16-18, 2011

P. Kanjanavirojkul, K. Keeratishananond, and P. Suksompong, "*Implementation of SU-MIMO and MU-MIMO GTD-System under Imperfect CSI Knowledge*", Proceedings of the International Conference on Signal Processing, Communications and Networking (ICSPCN 2011), Venice, Italy, April 27-29, 2011

T. Chanpokapaiboon, P. Puttawanchai, and P. Suksompong, "*Enhancing PAPR Performance of MIMO-OFDM Systems Using SLM Technique with Centering Phase Sequence Matrix*", Proceedings of the 8th Annual International Conference on Electrical Engineering/Electronics, Computer, Telecommunications, and Information Technology (ECTI-CON 2011), Khon Kaen, Thailand, May 17-19, 2011

P. Kanjanavirojkul, K. Keeratishananond, P. Suksompong, "*Implementation and Performance of Generalized Triangular Decomposition in Multi-user MIMO*", Proceedings of the International Conference on Information and Communication Technology for Embedded Systems 2011 (ICICTES 2011), pp. 130-134, Pattaya, Thailand, January 27-29, 2011.

S. Suppitux, S. Tangkachavana, T. Vinichhayakul, and P. Suksompong, "*Enhancing PAPR reduction for Tone Reservation Algorithms by Deep Clipping*", The 7th Annual International Conference on Electrical Engineering/Electronics, Computer, Telecommunications, and Information Technology (ECTI-CON 2010), Chiang Mai, Thailand, May 2010.

P. Suksompong and T. Berger, "*Jitter Analysis of Timing Codes for Neurons with Descending Action Potential Thresholds*", IEEE International Symposium on Information Theory (ISIT) 2006, July 11, 2006.

D. S. Chan, P. Suksompong, J. Chen, and T. Berger, "*Improving IEEE 802.11 Performance with Cross-Layer Design and Multipacket Reception via Multiuser Iterative Decoding*," IEEE 802.11-05/0946r0, September 2005.

J. Chen, P. Suksompong, and T. Berger, "*Communication through a Finite-State Machine with Markov Property*", Conference on Information Sciences and Systems (CISS) 2004, January 1, 2004.