PERSONAL DATA

Name : Dr. KOMSAN KANJANASIT
Position : Assistant Professor of Electrical Engineering
Email : komsan.k@psu.ac.th
Phone : 076276551
ORCID : 0000-0002-7396-501X
SCOPUS ID : 55582329000
Web of Science GAX-6360-2022
ResearcherID :

EDUCATION

Ph.D. Degree	Doctor of Philosophy (Electrical Engineering), Heriot-Watt University, Edinburgh, United Kingdom
Master Degree	Master of Engineering (Electrical Engineering), King Mongkut's Institute of Technology North Bangkok, Thailand
Bachelor Degree	Bachelor of Engineering (Electrical Engineering) , Rajamangala Institute of Technology, Thailand

RESEARCH PROJECTS

Research Projects

1) "MultiWaveS" The European Commission under the FP7 Project
2) "The VHF Band and Smart Meters" GB1412827.6 filed
3) "The Asymmetric Resonance for Sensing Applications" PSU Support Grants

TEACHING

977-352 Cyber-Physical Systems
977-342 Intelligent Conneted Objects
977-114 Digital and Logic Design
977-103 Physics for Engineers
240-441 Multicore Programming and Architecture
242-341 Embedded Systems Design
242-441 Advantage Computer Architecture and Organization
240-303 Ethical, Legal and Social Issues
240-631 Computer Arithmetic
242-480/240-480 Priciple of Robotics
242-401 Computer Enginring Project I
242-402 Computer Enginring Project II
240-308 Computer Enginring Project Preparation

Chakadkit Thaenchaikun and **Komsan Kanjanasit. "**A Comparative Study of OSPF Metrics in Routing Algorithms for Dynamic Path Selection in Network Security", ASEAN J. Sci. Tech. Report. 2025, 28(2), e256556. https://doi.org/10.55164/ajstr.v28i2.256556.

https://ph02.tci-thaijo.org/index.php/tsujournal/article/view/256556

4/2025

Terapass Jariyanorawiss, **Komsan Kanjanasit,** Wachira Chongburee, and Nattapon Sornsungnoen, "SAR Analysis in an Anatomical Head Model Using CFL-Optimized Yee Cells and an Accurate Dipole Model at 700 MHz for 5G Mobile Radiation," IEEE Access, Vol.13, pp.82718-82731, 2025 doi: 10.1109/ACCESS.2025.3568603.

https://ieeexplore.ieee.org/document/10994431

5/2025

Noppon Lertchuwongsa and **Komsan Kanjanasit**, "A Novel Trans-Dataset Ensemble Architecture for Sign Language Recognition," Journal of Advances in Information Technology, Vol. 15, No. 12, pp. 1315-1328, 2024.

https://www.jait.us/show-247-1610-1.html?fbclid=IwY2xjawHPa0hleHRuA2FlbQIxMAABHYTDqYSDvTHaBcAWJVwDlQbdtPEAznC3xoV4sYvrAKvvdEexpfZeyDUR8w_aem_vzTNaa_EBLi9s4UarWfjrw

12/2024

Komsan Kanjanasit, Tanatorn Tantipiriyakul and Changhai Wang, "Thin Film Resonant Metasurface Absorbers Using Patch-Based Arrays on Liquid Crystal Polymer Substrates for Centimeter-Wave Applications," Heliyon, 9, e35399, doi: https://doi.org/10.1016/j.heliyon.2024.e35399.

https://www.cell.com/heliyon/fulltext/S2405-8440(24)11430-2

8/2024

Komsan Kanjanasit, Pracha Osklang, Terapass Jariyanorawiss**,** Akkarat Boonpoonga, and Chuwong Phongcharoenpanich, "Artificial Magnetic Conductor as Planar Antenna for 5G Evolution," Computers, Materials & Continua, vol. 74, no. 1 pp. 503–522, Jan, 2023

https://www.techscience.com/cmc/v74n1/49855?fbclid=IwAR1PonohQBPlBkD4FTLBL1z-az8rLYa6JqKRMSjcOR3QRUgb4UG9qCgOuxk

1/2023

Tanatorn Tantipiriyakul and **Komsan Kanjanasit,** "Design and Simulation of Chessboard Coding Wave Artifacts," Journal of Information Science and Technology (JIST), vol. 13, no. 2 pp. 62–68, Dec, 2023

https://ph02.tci-thaijo.org/index.php/JIST/article/view/251563/170055

12/2023

Terapass Jariyanorawiss**, Komsan Kanjanasit** and Wachira Chongburee, "Creation of Rigorous Human Head Model from MRI Images with Reports on SAR Caused by 2.6 GHz 5G Mobile Handset Radiation," The ECTI Transactions on Electrical Engineering, Electronics, and Communications, Vol. 20, No.3, pp.461-470, Oct, 2022

https://ph02.tci-thaijo.org/index.php/ECTI-EEC/article/view/247522/167981

10/2022

Komsan Kanjanasit and Changhai Wang, "A Wideband Resonant Cavity Antenna Assembled Using a Micromachined CPW Fed Patch Source and a Two-Layer Metamaterial Superstrate," IEEE Transactions on Components, Packaging and Manufacturing Technology, Vol.9, No.6, pp.1142-1150, Jun,2019 (Impact Factor 1.66 ; ISI)

https://ieeexplore.ieee.org/document/8470978

6/2019

Irina Vendik, Alexander Rusakov, **Komsan Kanjanasit,** Jiasheng Hong, Dmitry Filonov, " Ultra-Wideband (UWB) Planar Antenna with Single-, Dual-, and Triple-Band Notched Characteristic Based on Electric Ring Resonator," IEEE Antennas and Wireless Propagation Letters, Vol. 16, pp.1597-1600, Jun, 2017 (Impact Factor 2.533 ; ISI)

https://ieeexplore.ieee.org/document/7817843/

6/2017

Komsan Kanjanasit and Changhai Wang, "Fano Resonance in a Metamaterial Consisting of Two Identical Arrays of Square Metallic Patch Elements Separated by a Dielectric spacer," Applied Physics Letters, Vol. 102, p. 251108, 2013 (Impact Factor 3.515 ; ISI)

https://aip.scitation.org/doi/10.1063/1.4812189

6/2013

T. Tantipiriyakul and K. Kanjanasit, "A Binary Hexagon Stripe Metamaterial Antenna," *2024 21st International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON)*, Khon Kaen, Thailand, 2024, pp. 1-4, doi: 10.1109/ECTI-CON60892.2024.10594859.

https://ieeexplore.ieee.org/document/10594859

5/2024

T. Tantipiriyakul and **K. Kanjanasit**, "A Binary Metamaterial for Planar Antennas," The 7th International Conference on Information Technology (InCIT 2023), Mae Fah Luang University, Chiang Rai, Thailand, 15th-17th November 2023.

11/2023

K. Kanjanasit and T. Jariyanorawiss, "A Broadband Resonant Cavity Antenna Using Tapered Two-Identical-Layer Metamaterial ," Proceedings of The 19th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2022), Hua-Hin, Thailand, 24–27 MAY. 2022, pp. 1-4

https://ieeexplore.ieee.org/document/9795591

5/2022

Y. Keaomanee, T. Kliangsuwan, **K. Kanjanasit**, "A Study of Lightweight Dynamic Algorithm of Power Management System for Small Satellite Applications," Innovation Aviation & Aerospace Industry - International Conference 2021 (IAAI-2021), Princess Sirindhorn AstroPark, Chiang Mai, Thailand, 28th-30th June 2021

https://sciforum.net/paper/view/10592

6/2021

K. Kanjanasit, I. B. Vendik, and A. Rusakov, "A Double Band-Notched UWB Antenna Based on Complementary ERR-Defected Ground," The 26th International Symposium on Antennas and Propagation, ISAP 2021, Taipei, Taiwan, 19–22 OCT 2021

https://ieeexplore.ieee.org/document/9614570

10/2021

K. Kanjanasit, T. Jariyanorawiss and P. Osklang, "High-Directivity Planar Antenna Based on AMC Metamaterials," The 2021 ECTI Workshop on Biomedical Electricals-Electronics and Communications Engineering (BEC 2021), Thailand, 10 DEC 2021

12/2021

T. Jariyanorawiss, **K. Kanjanasit** and W. Chongburee, "Computational Modeling of Human Head for 700 MHz Test with 5G Smart Phone," The 2021 ECTI Workshop on Biomedical Electricals-Electronics and Communications Engineering (BEC 2021), Thailand, 10 DEC 2021

12/2021

K. Kanjanasit, S. Sanesaowarod and N. Homsup, "A High-Gain Antenna Based on Ultrathin Planar-Feed Air-Filled Resonant Cavity," Proceedings of The 2020 International Electrical Engineering Congress (iEECON2020), Chiang Mai, Thailand, 4–6 MAR. 2020, pp. 1-4

https://ieeexplore.ieee.org/document/9077430

3/2020

K. Kanjanasit, S. Sanesaowarod and N. Homsup, "EIT-Like Effect in Metamaterials Based on Two-Layer Arrays for High-Gain Antennas," Proceedings of The 17th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2020), Phuket, Thailand, 24–26 JUN. 2020, pp. 304-307

https://ieeexplore.ieee.org/document/9158277

6/2020

K. Kanjanasit and C. H. Wang, "A Finite-Size Superstrate Based on Identical Patch Arrays for Broadband Resonant Cavity Antennas," Proceedings of The 2019 International Electrical Engineering Congress (iEECON2019), Hua Hin, Thailand, 6–8 MAR. 2019, pp.cm51-cm54

https://ieeexplore.ieee.org/document/8938925

3/2019

K. Kanjanasit and C. H. Wang, "Study of Multiband Resonant Absorbers Based on Modified Electric LC Resonators," Proceedings of The 15th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2018), Chiangrai, Thailand, 18–21 JUL. 2018,

pp.210-213

https://ieeexplore.ieee.org/document/8619910

7/2018

K. Kanjanasit and C. H. Wang, “A Broadband Resonant Cavity Antenna Using a Metamaterial Based on Double-Side Identical Arrays,” 2017 IEEE Conference on Antenna Measurements and Applications (CAMA), Tsukuba, Ibaraki, Japan, 4–6 DEC. 2017, pp.51-54

https://ieeexplore.ieee.org/document/8273475/

12/2017

A. Rusakov, I. B. Vendik, **K. Kanjanasit**, “Tri-Mode Electric Ring Resonator and Adjustable UWB Triple Band-Notched Antenna,” 2017 IEEE Conference of Russian Yong Researchers in Electrical and Electronic Engineering (EIConRus), St. Petersburg, Russia, 1–3 FEB 2017, pp.317-321

https://ieeexplore.ieee.org/document/7910555/

2/2017

K. Kanjanasit and C. H. Wang, “A High Performance Micromachined CPW Fed Aperture Coupled Compact Patch Antenna Using a Double-Tuned Impedance Matching Method,” The 2016 International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS 2016), Phuket, Thailand, 24-27 OCT. 2016, pp.134-137

https://ieeexplore.ieee.org/document/7824736/

10/2016

K. Kanjanasit, C. H. Wang, P. Record, “A Wideband Resonant Cavity Antenna Based on Fano Resonance Effect in a Two-layer Patch Array Superstrate,” The 7th International Conference on Metamaterials, Photonic Crystals and Plasmonics (META’16), Torremolinos (Málaga), Spain, 25–28 JUL 2016, pp.1219-1225

http://metaconferences.org/ocs/index.php/META16/index/pages/view/proceedings

7/2016

A. Rusakov, I. B. Vendik, **K. Kanjanasit**, J. Hong, D. Filonov, “Ultra-Wideband Antenna with Single- and Dual-Band Notched Characteristics Based on Electric Ring Resonator,” Proceedings of Days on Diffraction 2016, St. Petersburg, Russia, 27 Jun.–1 JUL 2016, pp.350-355

6/2016

P. Record and **K. Kanjanasit**, “A Compact VHF Antenna for Smart Meters,” Progress In Electromagnetics Research Symposium Proceedings (PIERS) Proceedings, Prague, 6-9 JUL 2015, pp.1607-1612

7/2015

I. B. Vendik, A. Rusakov, and **K. Kanjanasit**, “Printed UWB Antennas with Notched Bands,” Microwave Microelectronics 2015, St. Petersburg, Russia (2015), pp. 304-308

1/2015

K. Kanjanasit and C. H. Wang, “A High Directivity Broadband Aperture Coupled Patch Antenna Using a Metamaterial Based Superstrate,” Antennas and Propagation Conference (LAPC), 2012 Loughborough, UK, 12-13 Nov. (2012)

https://ieeexplore.ieee.org/document/6403004/

11/2012

S. Theerawisitpong; **K. Karnjanasit,** A Compact Modified-Meander Resonator for Microwave Bandpass Filter with Harmonic-Suppression, 2006 7th International Symposium on Antennas, Propagation & EM Theory, 26-29 Oct., Guilin, China

https://ieeexplore.ieee.org/document/4168373

10/2006 *RF*

K. Kanjanasit, V. Vivek, and N. Homsub, “Novel Design of a Wideband Improved U-slot on Rectangular Patch Using Additional Loading Slots” the 2nd International ECTI conferences, May, Thailand, (2005)

http://www.ecti-thailand.org/assets/papers/380_pub_24.pdf

5/2005

K. Kanjanasit, D. Worasawate, N. Homsub, and V. Vivek, “Bandwidth Improvement Technique for a U-slotted Rectangular Patch Antenna Using Coupled Slots” Proceedings of The 43rd Kasetsart University Annual Conference, Thailand, (2005)

http://www.lib.ku.ac.th/kuconf/kc4311021.pdf

1/2005

BOOKS

คมสันต์ กาญจนสิทธิ์ (2567) ตอนที่ 8.2 เทคโนโลยีสื่อสารไร้สายยุคที่ 6 หน่วยที่ 8 เทคโนโลยีสื่อสารไร้สายยุคที่ 5 และ 6 เอกสารการสอนชุดวิชา รหัส 99313 การสื่อสารไร้สายและเครือข่าย (Wireless Communication and Networking) ฉบับปรับปรุงครั้งที่ 1 พ.ศ. 2567 สาขาวิชาวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยสุโขทัยธรรมาธิราช จำนวน 59 หน้า สำนักพิมพ์มหาวิทยาลัยสุโขทัยธรรมาธิราช พิมพ์ครั้งที่ 1

10/2024

คมสันต์ กาญจนสิทธิ์ (2567) หน่วยที่ 9 โพรโทคอลการเคลื่อนที่และโมบายล์ไอพี เอกสารการสอนชุดวิชา รหัส 99313 การสื่อสารไร้สายและเครือข่าย (Wireless Communication and Networking) ฉบับปรับปรุงครั้งที่ 1 พ.ศ. 2567 สาขาวิชาวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยสุโขทัยธรรมาธิราช จำนวน 66 หน้า สำนักพิมพ์มหาวิทยาลัยสุโขทัยธรรมาธิราช พิมพ์ครั้งที่ 1

10/2024

คมสันต์ กาญจนสิทธิ์ (2566) หน่วยที่ 1 หลักการของระบบไซเบอร์กายภาพ ประมวลสาระชุดวิชา รหัส 99714 ระบบไซเบอร์กายภาพและการประยุกต์ (Cyber-Physical System and Applications) สาขาวิชาวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยสุโขทัยธรรมาธิราช จำนวน 59 หน้า สำนักพิมพ์มหาวิทยาลัยสุโขทัยธรรมาธิราช พิมพ์ครั้งที่ 1

10/2023

คมสันต์ กาญจนสิทธิ์ (2566) หน่วยที่ 2 สถาปัตยกรรมและโมเดลระบบไซเบอร์กายภาพ ประมวลสาระชุดวิชา รหัส 99714 ระบบไซเบอร์กายภาพและการประยุกต์ (Cyber-Physical System and Applications) สาขาวิชาวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยสุโขทัยธรรมาธิราช จำนวน 55 หน้า สำนักพิมพ์มหาวิทยาลัยสุโขทัยธรรมาธิราช พิมพ์ครั้งที่ 1

10/2023

คมสันต์ กาญจนสิทธิ์ (2567) ตอนที่ 7.2 เทคโนโลยีของอินเทอร์เน็ตของสรรพสิ่ง หน่วยที่ 7 เทคโนโลยีอินเทอร์เน็ตของสรรพสิ่ง เอกสารการสอนชุดวิชา รหัส 99410 การจัดการและการออกแบบระบบโทรคมนาคม (Telecommunication System Design and Management) ฉบับปรับปรุงครั้งที่ 1 พ.ศ. 2566 สาขาวิชาวิทยาศาสตร์และเทคโนโลยี มหาวิทยาลัยสุโขทัยธรรมาธิราช จำนวน 59 หน้า สำนักพิมพ์มหาวิทยาลัยสุโขทัยธรรมาธิราช พิมพ์ครั้งที่ 1

4/2023

CHAPTERS

Irina B. Vendik, Alexander S. Rusakov, and **Komsan Kanjanasit**, "Study of Ultra-wideband Antenna with Multi-notch Band Loaded with a Multimode Electric Ring Resonator and a Complementary Resonance Structure," Book Chapter 15 : Newest Updates in Physical Science Research (International Book), 2021. https://stm.bookpi.org/NUPSR-V11/article/view/3897

7/2021

OTHERS

Research participants:

1) The European Commission under the FP7 8 project “MultiWaveS”

2) Patent: VHF band and smart meters GB1412827.6 filed, Jul. 18, 2014

Scan Me !! CV Online

COLLEGE OF COMPUTING
Prince of Songkla University Phuket Campus
80 M.1 Vichitsongkram Road Kathu, Phuket 83120
Email : coc@phuket.psu.ac.th
Website : computing.psu.ac.th