Miss. Kannikar INTAWONG

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Personal Data			
E-Mail:	kannikar.i@cmu.ac.th	Date of Birth:	August 07, 1984
Nationality:	Thai	Marital Status:	Single
Languages:	Thai, French, English		

Education		
2019-2021	Master of Public Health, Faculty of Publich Health,	
	Chiang Mai University	
2011- 2017	PhD. Informatique (Computer Science)	
	LIRIS (Laboratoire d'InfoRmatique en Image et Systèmes d'information),	
	University Lumière Lyon2	
2009-2010	Exchange Master's degree: Eramus Mundus ECW eLINK program between	
	Chiang Mai University and the University Lumière Lyon2, France	
2007- 2009	Master of Science Software Engineering, College of Arts, Media and Technology,	
	Chiang Mai University	
2003-2007	Bachelor of Information Technology (IT), Computer Department, Maejo University	

Work Experiences

2018 - Present	Faculty of Public Health, Chiang Mai University	
	Position: Lecturer (Assistant professor)	
2015 - 2017	Institut de la communication (ICOM), University Lumière Lyon2	
	Position: Teacher assistant	
2008 - 2011	College of Arts, Media and Technology Chiang Mai University	
	Position: Lecturer	
2007 - 2008	Rajamangala University of Technology Lanna	
	Position: Computer academician (responsibility of KPI)	
2006 - 2007	Nomegic ltd., Bangkok, Thailand Position: Developer (UML tool.)	

Expertise

Expertise:

Artificial Intelligence (AI), Big data, image processing, Software engineering, Health Informatics

Publications

Journal:

- K.Intawong, S.Chariyalertsak, K.Chalom, T.Wonghirundecha, W.Kowatcharakul, A.Thongprachum, N.Chotirosniramit, W.Teacharak, P.Piamanant, P.Khammawan, J.Waneesorn, S.Iamsirithaworn.
 "Effectiveness of heterologous third and fourth dose COVID-19 vaccine schedules for SARS-CoV-2 infection during delta and omicron predominance in Thailand: a test-negative, case-control study". The Lancet Regional Health - Southeast Asia, 2023
- K.Intawong, S.Chariyalertsak, K.Chalom, T.Wonghirundecha, W.Kowatcharakul, P.Ayood,
 A.Thongprachum, N.Chotirosniramit, K.Noppakun, K.Khwanngern, W.Teacharak, P.Piamanant,
 P.Khammawan. "Reduction in severity and mortality in COVID-19 patients owing to heterologous third and fourth-dose vaccines during the periods of delta and omicron predominance in Thailand".
 International Journal of Infectious Diseasesthis. 2023
- A.Rayanakorn, S.Chautrakarn, K.Intawong, C.Chariyalertsak, P.Khemngern, D.Olson, S.Chariyalertsak.
 "A comparison of attitudes and knowledge of pre-exposure prophylaxis (PrEP) between hospital and Key Population Led Health Service providers: Lessons for Thailand's Universal Health Coverage implementation". Journal of PLoS ONE. 2022
- K.Intawong, D.Olson, S.Chariyalertsak. "Application technology to fight the COVID-19 pandemic: Lessons learned in Thailand". Journal of Biochemical and Biophysical Research Communications (BBRC). 2021
- K.Intawong, W.Boonchieng, E.Boonchieng, P.Lerttrakarnnon, K.Puritat. "A-SA SOS: A Mobile- and IoTbased Pre-hospital Emergency Service for the Elderly and Village Health Volunteers. International Journal of Advanced Computer Science and Applications(IJACSA). 2021
- K.Intawong, K.Puritat. "A Framework of Developing Mobile Gamification to Improve User Engagement of Physical Activity: A Case Study of Location-Based Augmented Reality Mobile Game for Promoting Physical Health". International journal of online and biomedical engineering. 2021
- K.Puritat, K.intawong, P.Ariya, S.sangmeung, P.joonrod. "Book Recommendation for Library Automation Use in School Libraries by Multi Features of Support Vector Machine". International Journal of Advanced Computer Science and Applications. 2021

- K.Intawong, "The new algorithm based on mechanic flow using in automatic zone detection for video surveillance". International Journal of Advances in Electronics and Computer Science (IJAECS). 2018
- K.Intawong, M.Scuturici, S.Miguet. "Automatic Traffic analysis in video sequences". International Journal of Advances in Computer Science & Its Applications. 2017

Conferences:

- K.Intawong, P.Prompantakorn, W.Boonchieng. "An improved automatic zone detection algorithm based on mechanic flow for complex scene event". The 6th International Conference on Digital Arts, Media and Technology (DAMT) and 4th ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering (NCON). Online conference. 2021
- K.Intawong, P.Ong-artborirak, W.Boonchieng. "Seamless Electronic Medical Record for Health Management System in Emergency Patients". The 6th International Conference on Digital Arts, Media and Technology (DAMT) and 4th ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering (NCON). Online conference. 2021
- K.Puritat, K.Intawong. "Development of open source automated library system with book recommedation system for small library". The 5th International Conference on Digital Arts, Media and Technology (DAMT). Pattatya. 2020
- K.Intawong. "Develpment of the Atificial Intelligent Thai word prediction system by using Assistive Technology for students with learning disabilities". The International Conference on Software, Knowledge, Information Management and Applications (SKIMA). Maldives. 2019
- P.Ariya, K.Puritat, K.Intawong. "Knowledge expert co-creation-based conceptual framework for educational game". International Conference on Digital Arts,Media and Technology (ICDAMT). Nan-Thailand. 2019
- K.Intawong, K.Puritat, P.Jarusawat. "Short Term prediction of statistics for Big data in video surveillance". International Computer Science and Engineering Conference (ICSEC). Chiang Mai-Thailand. 2018
- K.Intawong, K.Puritat. "The new algorithm based on mechanic flow using in automatic zone detection for video surveillance". The International Conference on Artificial Intelligence and Soft Computing (ICAISC), Bangkok-Thailand. 2018.
- K.Intawong, M.Scuturici, S.Miguet. "Detection of entry and exit zones in image sequences for automatic traffic analysis". The 12th IEEE International Conference on Advanced Video and Signal based Surveillance (AVSS), Karlsruhe- Germany. 2015.
- K.Intawong, M.Scuturici, S.Miguet. "Automatic traffic analysis in video sequences". The 3rd International Conference On Advances in Computing, Control, and Network (ACCN), Bangkok-Thailand. 2015.

• K.Intawong, M.Scuturici, S.Miguet. "A new pixel-based quality measure for segmentation algorithms integrating precision, recall and specificity". International Conference on Computer Analysis of Images and Patterns (CAIP), York - UK. 2013.

Keynote speaker/ invite lecturer

- K.Intawong "How applications prevent and control COVID-19 pandemic". Global health class in Department of Public Health Sciences, University of California Davis, USA. January, 2021.
- K.Intawong "Innovative platforms for fighting COVID-19 pandemic : lesson learned from Thailand ". Asia-Pacific University-Engagement Network (APUCEN), University for Society International Conference (U4SIC), Malaysia. November, 2020.
- K.Intawong "Creating a multi-level data center system for fighting COVID-19 pandemic : lesson learned from Thailand". the 4th International Academic Forum of LSI, GXMU. October, 2020.

Oral presentations / seminars:

- K.Intawong "Big data analysis for Chiang Mai community problems by using Crowd sourcing platform". International Conference on One Medicine One Sciences (ICOMOS), Chiang Mai- Thailand. 2019.
- K.Intawong "Road safety and Traffic calming". Ma thèse en 180 secondes, Lyon- France. 2014.
- K.Intawong, M.Scuturici, S.Miguet. "Détection des zones d'entrée et de sortie dans des séquences d'images pour l'analyse automatique de la circulation". Suivi multi-objets dans les séquences vidéo complexes (GdR- isis), Paris- France. 2015.

Chair:

• Session chairs in The 3rd International Symposium on emerging technologies for education (SETE), Chiang Mai-Thailand. 2018.

Researchs

- (2022) Development of Intermediate Care System using Virtual Reality Technology to Improve Symptoms of Patients After Rehabilitation <u>Funding</u> Chiang Mai university (New Researcher) <u>Responsibility</u> Project Leader <u>Description</u> to develop a virtual reality system and simulate different scenarios at each location to help Patients After Rehabilitation (IMC)
- (2022) Development of Provincial Health Information system management for improving Emergency Care System (Phase3) <u>Funding</u> National Research Council of Thailand (NRCT) <u>Responsibility</u> Project Leader

<u>Description To</u> analysis and synchronize data with a central database (Integral Health Information Managements: IHIMs) and provide eco-system in healthcare.

 <u>(2021)</u> The development system of virtual reality for develop social interaction skill and nonverbal communication for children learning disability in autism spectrum disorder <u>Funding</u> National Innovation Agency (Public Organization) <u>Responsibility</u> Project Leader

<u>Description</u> to develop a virtual reality system and simulate different scenarios at each location to help practice and develop social skills for children with social and emotional disabilities

- (2021) Raise awareness through digital animationand game for screening risk of students with learning disabilities <u>funding</u> Thai Media Fund <u>Responsibility</u> Project Leader <u>Description</u> To create animations and games for students to assess their risk of developing learning disabilities.
- (2021) Development of a support system for information management of COVID-19 in Chiang Mai Province <u>Funding</u> National Research Council of Thailand (NRCT) <u>Responsibility</u> Project Leader

<u>Description To</u> analysis and synchronize data with a central database API (the provincial HIS database and the Chiang Mai central database: CMHIS)

- 6. (2020) HIV pre-exposure prophylaxis monitoring and process evaluation for Thailand's National PrEP roll-out under the Universal Health Coverage (UHC) for fiscal year 2020 <u>Funding</u> The Joint United Nations Programme on HIV/AIDS; UNAIDS and The Global Fund to Fight AIDs, Tuberculosis and Malaria <u>Responsibility</u> Researcher <u>Description</u> To evaluate data and implement Thailand's cascade dashboard system
- (2020) Development of Intelligent Data Management Systems For Running / Cycling In Seamless Emergency Referral <u>Funding</u>_Chiang Mai university (New Researcher) <u>Responsibility</u>_Project Leader <u>Description</u>_To analyze data and create an intelligent database system for running/cycling in order to facilitate fast emergency referrals for first aid help to runners experiencing medical problems during races.
- (2020) Innovative e-marketplace with applied artificial intelligence and data analytic <u>Funding</u> National Research Council of Thailand (NRCT) <u>Responsibility</u> Project Leader

Description To develop a unique Thai SME system for e-commerce and overseas shipping

9. <u>(2019)</u> Development of a support system for information management of COVID-19 in Chiang Mai Province

Funding National Research Council of Thailand (NRCT)
 Responsibility Project Leader
 Description To evaluate situational analysis and design technologies for the construction of a surveillance system for communicable disease health concerns (COVID-19).

- 10. (2019) Development of completely on integration system emergency care service in medical and public health (Spearhead)
 Funding National Research Council of Thailand (NRCT)
 Responsibility Project Leader (Mini project)
 Description To collect problems, analyze gaps, and assess the state of the service system and provides comprehensive medical and public health emergency care.
- 11. (2019) Analysis of the system, development of a processing model, and design of the information presentation in the national information system for HIV/AIDS patients. (National AIDS Program : NAP+)

<u>Funding</u> Bureau of AIDS, TB, STIs, Department of Disease Control, ministry of public health. <u>Responsibility</u> Researcher

<u>Description</u> To develop a model of indication processing and a dashboard for HIV services. NAP+ is the abbreviation for the National AIDS Program.