COLLEGE OF COMPUTING
Prince of Songkla University Phuket Campus

PERSONAL DATA

Name : Dr. PANISA TREEPONG
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EDUCATION

Ph.D. Degree	2014 – 2017	Ph.D. in Computer Science, Ecole doctorale Sciences physiques pour l'ingénieur et microtechniques, Université Bourgogne Franche-Comté, Besançon, France
Master Degree	2008 – 2010	M.Sc. in Bioinformatics, School of Bioresources and Technology and School of Information Technology, King Mongkut's University of Technology Thonburi, Thailand.
Bachelor Degree	2003 – 2007	B.Sc. in Information Technology, Department of Information Technology, Faculty of Technology and Environment, Prince of Songkla University - Phuket Campus, Thailand.

RESEARCH PROJECTS

Bioinfomatics analysis of the global outbreak of *Pseudomonas aeruginosa* clone ST235
panISa: a software to search insertion sequence (IS) on resequencing data
(https://github.com/bvalot/panISa)

TEACHING

- Business Intelligence (ปัญญาทางธุรกิจ)
- Data Visualization (การสร้างภาพนามธรรมข้อมูล)
- Introduction to Computer Programming (การเขียนโปรแกรมคอมพิวเตอร์เบื้องต้น)
- Database Systems (ระบบฐานข้อมูล)
- Database System for Software Engineering (ระบบฐานข้อมูลสำหรับวิศวกรรมซอฟต์แวร์)
- Data Structures and Algorithms (โครงสร้างข้อมูลและอัลกอริทึม)
- Data Mining (เหมืองข้อมูล)
- Data Warehousing and Data Mining (คลังข้อมูลและเหมืองข้อมูล)
- Information Retrieval (การค้นคืนสารสนเทศ)
- Organization and Management (องค์กรและการจัดการ)
- Computer and Internet Technology (คอมพิวเตอร์และเทคโนโลยีอินเทอร์เน็ต)

INTERNATIONAL JOURNAL ARTICLES

N. Theera-Ampornpunt and P. Treepong, " Visual Food Ingredient Prediction Using Deep Learning with Direct F-Score Optimization," *Foods*, vol. 14, no. 24, Dec. 2025, Art. no. 4269, doi: 10.3390/foods14244269.

https://www.mdpi.com/2304-8158/14/24/4269

12/2025   *F-score optimization, loss function, Deep learning, food ingredient prediction, image classification, cost-sensitive learning*

N. Theera-Ampornpunt and P. Treepong, "KediNet: a hybrid deep learning architecture for Thai dessert recognition," IEEE Access, vol. 13, pp. 86935–86948, 2025, doi: 10.1109/ACCESS.2025.3569435.

https://ieeexplore.ieee.org/document/11002498

5/2025   *Deep learning, food recognition, image classification, dessert*

N. Theera-Ampornpunt and P. Treepong, "Thai food recognition using deep learning with cyclical learning rates," IEEE Access, vol. 12, pp. 174204-174221, 2024, doi: 10.1109/ACCESS.2024.3503672.

https://ieeexplore.ieee.org/document/10759670

10/2024   *Deep learning, food dataset, food recognition, image classification, learning rate*

P. Treepong, N. Theera-Ampornpunt, "Early Bread Mold Detection Through Microscopic Images Using Convolutional Neural Network," *Current Research in Food Science*, vol. 7, Aug. 2023, Art. no. 100574.

https://www.sciencedirect.com/science/article/pii/S2665927123001429

8/2023   *image classification, Microbiology, food safety, food computing*

N. Theera-Ampornpunt, P. Treepong, "Optimizing Hyperparameters for Thai Cuisine Recognition via Convolutional Neural Networks," Traitement du Signal, vol. 40, no. 3, pp. 1187–1193, 2023.

https://iieta.org/download/file/fid/100033

6/2023   *food computing, image recognition, object recognition, Thai food*

P. Treepong, C. Guyeux, A. Meunier, C. Couchoud, D. Hocquet, and B. Valot, "panISa: ab initio detection of insertion sequences in bacterial genomes from short read sequence data," *Bioinformatics*, vol. 34. pp. 3795–3800, 2018.

https://doi.org/10.1093/bioinformatics/bty479

11/2018   *Mathematical & Computational Biology, Biotechnology & Applied Microbiology, Biochemical Research Methods*

P. Treepong, V.N. Kos, C. Guyeux, D.S. Blanc, X. Bertrand, B. Valot, D. Hocquet, "Global emergence of the widespread Pseudomonas aeruginosa ST235 clone", Clinical Microbiology and Infection, vol.24, no.3. pp.258–266, 2018.

https://doi.org/10.1016/j.cmi.2017.06.018

3/2018   *Medicine, Infectious Diseases, Microbiology*

INTERNATIONAL PROCEEDINGS

P. Treepong, S. Prom-on, J. H. Chan, A. Meechai, N.Hirankarn, "Effects of RNA Quality on Gene Expression Functional Profiles", 14th International Annual Symposium on Computational Science and Engineering (ANSCSE14), Mae Fah Luang University, Chiang Rai, Thailand, pp. 65-70, 2010.

1/2010

AWARDS

2014 - 2017 Ph.D. scholarship from Prince of Songkla University.
2008 - 2010 Full scholarship, Master's Degree in Bioinformatics, King Mongkut's University of Technology Thonburi, Thailand.

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