Curriculum Vitae

Personal Information

Name	Chao-Yang (Bright) Kuo, Ph.D.
Position Title	Assistant Professor
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Education

Duration	Institution	Degree
Sep. 2017- Jan. 2022	Graduate Institute of Biomedical Informatics, Taipei Medical University	Ph. D.
Sep. 2013- Jun. 2015	Science in Applied Statistics (Statistics and Information Science), Fu-Jen Catholic University	Master

Licenses & Certifications

SAS Certified Specialist: Machine Learning Using SAS Viya 3.5	SAS Institute Inc.
Level 3 Senior Examination, Statistics	Examination Yuan

Patents

1. HEALTH DYNAMIC TRACKING AND ASSESSING DEVICE AND SYSTEM FOR DISABLED
2. METHOD AND SYSTEM FOR PREDICTING PREGNANCY RATE OF ASSISTED REPRODUCTION TECHNOLOGY USING ARTIFICIAL INTELLIGENCE

Specialties and Research Interests

1. Machine Learning

2. Artificial Intelligent

3. Statistics

4. Explanable AI

5. Smart Healthcare

Professional Appointment

Duration	Title	Institution
2022/2-present	Assistant Professor	National Taipei University of Nursing and Health Sciences
2009/3-2018/9	Section Assistant / Specialist	Department of Census, Directorate General of Budget, Accounting and Statistics, Executive Yuan

Publications

1. Shwu-Feng Tsay, Cheng-Yu Chang, Sing Shueh Hung, Jui-Yuan Su, **Chao-Yang Kuo***, Pei-Fan Mu (2024, May). Pain prediction model based on machine learning and SHAP values for elders with dementia in Taiwan. *International Journal of Medical Informatics.*

2. **Chao-Yang Kuo**, Wei-Wen Yang, Emily Chia-Yu Su (2024, Mar). Improving dengue fever predictions in Taiwan based on feature selection and random forests. *BMC Infectious Diseases*.

3. Li-Yin Lin, Atina Husnayain, Yi-Tui Chen, **Chao-Yang Kuo*** (2024, Jan). The association between interest of nutritional supplements and COVID-19 pandemic - evidence from Google Trends. *BMC Public Health*.

4. **Chao-Yang Kuo**, Yu-Tung Chang (2023, Oct). Introduction of spatial analysis approaches for Emergency Medical Services data: Using the Kaggle dataset as an example. *Journal of Paramedicine and Emergency Response*

5. Shu-Tai Shen Hsiao, **Chao-Yang Kuo**, Tsan-Hon Liou, Tai-Ton Wang, Yen-Lin Liu, Sung-Hui Tseng (2023, Aug). Developing an International

Classification of Functioning, Disability and Health Core Set for Pediatric Brain Tumor Survivors in Chinese Clinical Settings. *Cancer Nursing*.

6. Yi-Tui Chen, Emily Chia-Yu Su, Fang Ming Hung, Tomoru Hiramatsu, Tzu-Jen Hung, **Chao-Yang Kuo*** (2023 May). Constructing a Learning Curve to Discuss the Medical Treatments and the Effect of Vaccination of COVID-19. *Healthcare.*

7. Chen-Chih Chung, Emily Chia-Yu Su, Jia-Hung Chen, Yi-Tui Chen, **Chao-Yang Kuo*** (2023, Feb). XGBoost-Based Simple Three-Item Model Accurately Predicts Outcomes of Acute Ischemic Stroke. *Diagnostics*.

8. Cheng-Wei Wang[†], **Chao-Yang Kuo**[†], Chi-Huang Chen, Yu-Hui Hsieh, Emily Chia-Yu Su (2022, Jun). Predicting Clinical Pregnancy Using Clinical Features and Machine Learning Algorithms in In Vitro Fertilization. *PLoS One*. [†]Equal Contribution

9. **Chao-Yang Kuo**, Chia-Wei Liu, Chien-Hung Lai, Jiunn-Horng Kang, Sung-Hui Tseng, Emily Chia-Yu Su (2021, Dec). Prediction of robotic neurorehabilitation functional ambulatory outcome in patients with neurological disorders. *Journal of NeuroEngineering and Rehabilitation*, 18(1), 174.

10. **Chao-Yang Kuo**, Cheng-Chun Lee, Yuh-Lin Lee, Shueh-Chun Liou, Jia-Cheng Lee, Emily Chia-Yu Su, Yi-Wei Chen (2021, Feb). Visual light perceptions caused by medical linear accelerator: Findings of machine-learning algorithms in a prospective questionnaire-based case–control study. *PLoS One,* 16(2), e0247597.

11. Herdiantri Sufriyana, Atina Husnayain, Ya-Lin Chen, Chao-Yang Kuo, Onkar Singh, Tso-Yang Yeh, Yu-Wei Wu, Emily Chia-Yu Su (2020, Nov). Comparison of Multivariable Logistic Regression and Other Machine Learning Algorithms for Prognostic Prediction Studies in Pregnancy Care: Systematic Review and Meta-Analysis. *JMIR Medical Informatics*, 8(11), e16503.