

Dhup Bhukdee

Bangkok, Thailand

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Clinical data scientist. M.D. candidate. Expected graduation April 2027. Updated 2026-08-18.

Interested in a hybrid AI-and-healthcare role on a physician-data scientist path: clinical AI, digital biomarkers, or RWE, in Bangkok, Singapore, or remote, from mid-2027.

EDUCATION

M.D., Chulalongkorn University, Bangkok, Thailand

Expected April 2027

B.S., Mahidol University International College, Nakhon Pathom, Thailand

2022

Major: Biomedical Sciences. First Class Honors. Minors: Chemistry and Computer Science.

EXPERIENCE

Researcher and Data Scientist, Chulalongkorn University

Jul 2020 - Present

Centers: Computational Molecular Biology (CMB@CU); AI in Medicine (CU-AIM).

- Build machine-learning subtypes from cognitive scores and biomarkers.
- Design clinical applications that join AI-learned MCI subtypes with clinical relationships.

Data Scientist, The Gang Technology Co., Ltd., Bangkok (COVID-19 Vaccine Effectiveness Project) Oct 2022 - Dec 2024

Data science consult for the Bureau of Epidemiology, Ministry of Public Health. Part-time Data Scientist (Oct 2022 - Dec 2022); Data Scientist IV (Dec 2022 - Sep 2023); part-time Data Scientist (Sep 2023 - Dec 2024) during medical study.

- Designed and ran a 1:4 matched case-control study (n=134,135; severe cases n=26,827) from a national COVID-19 dataset of more than 15 million records. Conditional logistic regression: univariate, multivariate, and stratified models.
- Tested more than 40 matched case-control prototypes with different match conditions, outcomes, and exposures. Odds of a severe outcome approximately halved per added dose; efficacy peaked 1 to 2 months after the latest dose. Results helped set the national COVID-19 booster-interval policy.
- Built the analysis pipeline in Python (Pandas, Statsmodels, Lifelines): case-control matching, model fits, stratification, and forest-plot reports.
- Ran a retrospective cohort study (n=138,264 of 156,574 screened): one-fifth-dose intradermal ChAdOx1 booster against intramuscular dosing (Kaplan-Meier and Cox). Noninferior protection, adjusted HR 0.88, 95% CI 0.76 to 1.02. Last and corresponding author, International Journal of Infectious Diseases, 2024.
- Trained Ministry of Public Health staff on Python and vaccine-efficacy analysis.

Queen Savang Vadhana Memorial Hospital, Chonburi, Thailand

Dec 2024 - Present

- Clinical clerk at Queen Savang Vadhana Memorial Hospital since December 2024.
- Extern at Queen Savang Vadhana Memorial Hospital from November 2025.

SKILLS

Python. Unsupervised ML (Louvain, Leiden). Survival and longitudinal analysis (KM, Cox, CTMC). RFECV and SHAP. NumPyro. U-Net. ComBat and CovBat. scikit-learn. Optuna and MLflow. Streamlit.

SELECTED PUBLICATIONS

Bhukdee, D., Nuwongsri, P., Israsena, N., and Sriswasdi, S. "Improved delineation of colorectal cancer molecular subtypes and functional profiles with a 62-gene panel." Molecular Cancer Research 2023; 21(3):240-252. doi: 10.1158/1541-7786.MCR-22-0476. (March 2023 Journal Cover) (First author)

Jangiam, W., Swangpun, K., Iamsirithaworn, S., Piriyaatit, S., and Bhukdee, D. "Relative vaccine effectiveness of ChAdOx1/AZD1222 vaccines as booster dose via intradermal injection with a one-fifth dose compared with the intramuscular injection in the prevention of SAR-CoV-2 infections in Phuket: A retrospective cohort study." International Journal of Infectious Diseases 2024; 147:107179. doi: 10.1016/j.ijid.2024.107179. (Special Issue: IJID 25th Anniversary) (Last and corresponding author)

MoCA abstracts: AAN 2026 (doi: 10.1212/WNL.0000000000213276); WCN 2025 (doi: 10.1016/j.jns.2025.124307); ECNP 2024 (doi: 10.1016/j.nsa.2024.104424).

Public tools: <https://aan2026.streamlit.app>. <https://polarcms.streamlit.app>.