



Thanate Angsuwatanakul, Ph.D.

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Rangsit University, Thailand

WORK ADDRESS

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EDUCATION

Doctor of Philosophy (2012 – 2020)

Systems Life Sciences, Kyushu University, Japan

Master of Engineering (2004 – 2007)

Biomedical Electronics Engineering, King Mongkut's Institute of Technology
Ladkrabang, Thailand

Bachelor of Engineering (1997 – 2001)

Electrical Engineering, King Mongkut's Institute of Technology Ladkrabang,
Thailand

WORK EXPERIENCE

December 2007 – present :

Lecturer of College of Biomedical Engineering, Rangsit University, Thailand

December 2001 – December 2004 :

Engineer of Accelerator Technology Division, Synchrotron Light Research Institute
(Public Organization), Thailand

RESEARCH EXPERTISE

Bioelectronics, Signal processing, Neuro – informatics,

Electroencephalography (EEG), Functional near-infrared spectroscopy (fNIRS)

RESEARCH INTERESTS

Biomedical electronics, Medical signal and image processing,

Brain function analysis, Brain computer interface (BCI), Neuro – marketing

PUBLICATIONS

Journal Publications

- O'Reilly, J. A., **Angsuwatanakul, T.**, & Wehrman, J. (2022). Decoding violated sensory expectations from the auditory cortex of anaesthetised mice: Hierarchical recurrent neural network depicts separate 'danger' and 'safety' units. *European Journal of Neuroscience*, 56(3), 4154-4175.
- Pititheeraphab, Y., **Angsuwatanakul, T.**, Pintavirooj, C., & Khemanuwong, T., (2022). Design and Construction of Continuous Passive Motion (CPM) for Arm Rehabilitation Device. *International Journal of Applied Biomedical Engineering (IJABME)*, 15(2), 1-9.
- O'Reilly, J. A., & **Angsuwatanakul, T.** (2021). More evidence for a long-latency mismatch response in urethane-anaesthetised mice. *Hearing Research*, 408, 108296.
- **Angsuwatanakul, T.**, O'Reilly, J., Ounjai, K., Kaewkamnerdpong, B., & Iramina, K. (2020). Multiscale Entropy as a New Feature for EEG and fNIRS Analysis. *Entropy*, 22(2), 189.
- Phukhachee, T., Maneewongvatana, S., **Angsuwatanakul, T.**, Iramina, K., & Kaewkamnerdpong, B. (2019). Investigating the Effect of Intrinsic Motivation on Alpha Desynchronization Using Sample Entropy. *Entropy*, 21(3), 237.

Conference Proceedings

- **Angsuwatanakul, T.**, Pititheeraphab, Y., Thongpance, N., Phairot, E., & Khemanuwong, T. (2022). Incorporating Project-based Learning (PBL) in Designing Medical Electronics Modules: An X-Ray Reconstruction System with Line Photo Detectors Project. *Proceedings of the 5th International Conference on Applied Liberal Arts: ICAA 2022. COUNCIL_CERTIFIED*. King Mongkut's Institute of Technology Ladkrabang, Thailand. (20 May 2022)
- Khemanuwong, T., Inthaphuk, N., O'Reilly, J. A., & **Angsuwatanakul, T.** (2021). EEG analysis of brain activity for computer-based and paper-based tests. *Proceedings of Life Engineering Symposium (LE 2021)*, Fukuoka, Japan, 4 September 2021.
- Khemanuwong, T., **Angsuwatanakul, T.**, Phairot, E., Jarijitpaibul, D., Promsuwan, P., & Uampittaya, P. (2021). Reading comprehension proficiency of English major students: *Proceedings of the 7th Asian Conference on Education & International Development (ACEID2021)*, Tokyo, Japan, 27 May 2021.
- Khemanuwong, T., Phairot, E., Hui, S. K., & **Angsuwatanakul, T.**, (2021). A Correlational Investigation into sub-skills of reading comprehension: evidence from Thai-READS. *The 6th IAFOR International Conference on Education – Hawaii, Honolulu, Hawaii, USA, 12 March 2021*.
- **Angsuwatanakul, T.**, Inthaphuk, N., O'Reilly, J. A., Ismail, S.A.M.M., Chantragatravi, C., & Khemanuwong, T. (2021). Brain function analysis of computer-based and paper-based tests using EEG: A pilot study. *Globalization Revisited: Building Organization Resilience with Digital Transformation: Proceedings of the 4th PIM International Conference*, Bangkok, Thailand, 3 March 2021

PUBLICATIONS

Conference Proceedings

- **Angsuwatanakul, T.** & Boonnak, N. (2020, August). The Effect of Binaural Beat Auditory Stimulation for Relieving Stress of Biomedical Engineering Students: a Pilot Study. In 2020 Princess Galyani Vadhana Institute of Music International Symposium 2020
- Chantararat, T., Sangworasil, M., **Angsuwatanakul, T.**, Puttasakul, T., O'Reilly, J. A., & Matsuura, T. A (2020, May). Two-channel Electromyogram-based Robotic Arm System: A Continuous Wireless Control using Simulated Hand Gesture Patterns. In *2020 5th RSU National and International Research Conference on Science and Technology, Social Sciences, and Humanities (RSUSSH)*
- **Angsuwatanakul, T.**, A-Lad, K., Jung-In, W., Sangworasil, M., O'Reilly, J. A., & Matsuura, T. (2019, August). Measuring Brain Activity for Preference Tasks Using Functional Near-Infrared Spectroscopy (fNIRS). In *2019 Life Engineering Symposium (LE2019)*, Bangkok, Thailand.
- **Angsuwatanakul, T.**, A-Lad, K., Jung-In, W., Suprabha, Y., Inthaphuk, N., Sangworasil, M. & O'Reilly, J. A. (2019, August). Analysis of Brain Activity for Preference Tasks Using EEG Signals. In *2019 Life Engineering Symposium (LE2019)*, Bangkok, Thailand.
- **Angsuwatanakul, T.**, Chairaek, S., Charoenyingsataporn, T., Chantararat, T., Pechprasan, S. & Sangworasil, M. (2019, May). A Study of Vibrotactile Stimulator for Quadriceps Muscle: Analysis of EMG Reaction Signal. In *2019 4th RSU National and International Research Conference on Science and Technology, Social Sciences, and Humanities (RSUSSH)* (pp. 1744 – 1753)

AWARDS & HONORS

Start-up

- Winner: awarded from Smart Startup Company by GSB Startup 2022 titled “*Peachy music therapy for brain relaxation*”.

Innovations

- Silver medal: awarded from Thailand New Gen Innovators Award 2021 title “*Game demo “BCI Drift” for user engagement in attention*”.
- Honorable mention in Science and Technology Innovation, Thailand Innovation Awards 2010 title “*Portable EKG Monitor using ARM7*”.