Fu-Te Wong

Contact Information

Cell phone: +886 911879823
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Education

2008–2012 M.S., Psychology, National Chung Cheng University, Chia-yi, Taiwan.

2000–2004 B.S., Psychology, Kaohsiung Medical University, Kaohsiung, Taiwan.

Experience

2019, 9- Research Assistant

Institute of Linguistics,
Academia Sinica, Taiwan

Principal investigator: Dr. Chih-Mao Huang, Department of Biological Science and Technology, National Chiao Tung University, Taiwan; Institute of Linguistics, Academia Sinica, Taiwan

Duties: Dynamical topological analysis in multimodal brain imagings (MRI, fMRI, DTI, and MEG) in resting state and tasks of working memory between young and old populations

2019, 6-8 Research Assistant

Center for Artificial Intelligence in Medicine,
Taipei Medical University
Translational Imaging Research Center,
Taipei Medical University Hospital

Principal investigator: Dr. Cheng-Yu Chen, Center for Artificial Intelligence in Medicine, Taipei Medical University, Taiwan

Duties: Developing deep learning algorithms for automated diagnosis of idiopathic normal pressure hydrocephalus and brain tumor segmentation; Developing resting-state and task-based functional MRI protocol and data pipeline for clinical assessment; Mild traumatic brain injury studies

2019, 1-5 Research Assistant

Department of Medical Imaging and Radiological Sciences, Chang Gung University

Principal investigator: Dr. Jun-Cheng Weng, Department of Medical Imaging and Radiological Sciences, Chang Gung University, Taiwan

Duties: Developing machine (deep) learning algorithms for classification of patients with mood disorder based on their multimodal imaging data (fMRI, MRI, perfusion and diffusion datasets)

2017,12-2018 | Research Assistant

Research Center of Brain and Consciousness,
Taipei Medical University

Principal investigator: Dr. Niall William Duncan, Research Center of Brain and Consciousness, Taipei Medical University, Taiwan

Duties: f/MRI, MRS, PET, and Transcriptome Multimodal Network Analysis/Visualization; Cerebellocortical dynamical topological analysis in patients with mood disorder

2017, 9-12 | Software Engineer

Cybersecurity Technology Institute,
Institute for Information Industry

2017, 8-9 | Contract Employee

Education Department of Penghu County

2016, 2017 | Visiting Student

Modeling and Informatics Lab, National Taiwan University

Principal investigator: Dr. Tsung-Ren Huang, Department of Psychology, National Taiwan University, Taiwan

Duties: Setting up computer clusters (with CDH) for large scale and real time neural image data analysis—thunder-project; TensorflowOnSpark; System administrator

Project: Alignment of chatbot LU and NLG models with human brain activities in a conversational context

2016, 1-2 | Research Assistant

The Vision Neuroscience Lab, National Taiwan University

Principal investigator: Dr. Chien-Chung Chen, Department of Psychology, National Taiwan University, Taiwan

Duties: MEG data analysis; building interface to co-register MEG and MRI data visualization

2014 - 2015 | Research Assistant

Explorer of Perception & Attention Lab, National Taiwan University

Principal investigator: Dr. Su-Ling Yeh, Department of Psychology, National Taiwan University, Taiwan

Project title: Neural and mental representation for the environment—perception and memory of statistical regularities
Aims: Studying how our mind and brain extract statistical regularities in the environment with visual perception, attention, and memory operation.

Project title: Temporal integration of semantic information under continuous flash suppression
Aims: Investigating neural processing and connectivity of temporal integration of semantic information under continuous flash suppression

Duties: Design behavioral and fMRI experiments; analyzing data (tool: Matlab, SPM, FSL, and Psychtoolbox); coordinator; managed funds

2014 | Licensed Psychologist
Public Health Bureau, Penghu County
Duties: Psychological assessment and therapy

2014 | Visiting Student
Modeling and Informatics Lab, National Taiwan University
Principal investigator: Dr. Tsung-Ren Huang, Department of Psychology, National Taiwan University, Taiwan
Duties: Building up a Hadoop/Spark computer cluster for big data analysis and applied machine learning algorithms to analyze the difference in DSI and genome data sets between people with schizophrenia and control participants

2013 | Licensed Psychologist in Taiwan

2011–2012 | Clinical Psychologist (Full-time Internship)
Taipei Veterans General Hospital, Taipei
Psychiatry Department,
Neurological Institute,
Rehabilitation Center

2011 | Teaching Assistant
Course: Experiment Design
National Chung Cheng University, Taiwan

2010 | Teaching Assistant
Course: Perception Psychology
National Chung Cheng University, Taiwan

2009–2011 | Research Assistant
Principal investigator: Dr. Tzu-Ching Chiang, Department of Psychology, National Chung Cheng University, Taiwan
Duties: Experiment design and data analysis

2006–2007 | Research Assistant
Principal investigator: Dr. Chung-Ping Cheng, Department of Psychology, National Chengchi University, Taiwan
Duties: Managing funds; data analysis using Lisrel

2004–2006 | Mandatory Military Service
Mental Health Center of Penghu Defense Command, Taiwan
Serving as an assistant mental health counselor after basic military training

Publications

Chen, V.C.-H., Wong, F.-T., Cheok, M.T., Tsai, Y.-H., Chang, Y.-P.E., McIntyre, R.S. & Weng, J.-C. (Under review). CNN-based deep learning model for predicting differential suicidality in depressive patients using brain generalized q-sampling imaging.

Poster Presentations

Wong, F.-T., Chen, V.C.-H., Tsai, Y.-H., & Weng, J.-C. (2019). *A convolutional neural network based deep learning model to predict depressive patients with suicide attempts using brain structural imaging*. Poster presented at the Neuroscience 2019, Chicago, IL.

Wong, F.-T. & Duncan, W.N. (2018). *The $GABA_A$ receptor binding SCN is more related to ion channel activity-related TBN than cortical thickness SCN*. Poster presented at the Neuroscience 2018, San Diego, CA.

Wong, F.-T. & Yeh, S.L. (2015). *Visual adaptation to mean size occurs without awareness*. Poster presented at the 2015 NTU-Kyoto University Cognitive Neuroscience Symposium: Mental and Neural Representation for the Environment, Taipei.

Wong, F.-T. & Chiang, T.-C. (2012). *The modulation effect of stimuli duration on dual-process system*. Poster presented at the Neuroscience 2012, New Orleans.

Weng, F.-T. & Chiang, T.-C. (2011). *Dual-processing shifting*. Poster presented at the ASSC15, Kyoto.

Chang, Y.-C., Yang, H.-N., Chen, S.-P., Weng, F.-T., & Cheng, C.-P. (2004). *Statistical power in researches of Taiwan's clinical psychology and psychiatry—examples of Chinese Journal of Psychology and Taiwanese Journal of Psychiatry*. Poster presented at the 43th Annual Conference of Taiwanese Psychological Association, Taipei.

Fen, X.-H., Lin, W.-H., Weng, F.-T., Chen, S.-P., & Cheng, C.-P. (2004). *Multiplicity in researches of Taiwan's clinical psychology and psychiatry—examples of Chinese Journal of Psychology and Taiwanese Journal of Psychiatry*. Poster presented at the 43th Annual Conference of Taiwanese Psychological Association, Taipei.

Thesis

Wong, F.-T. (2012). *The effects of the duration of stimuli presentation and positive emotion on Dual-process* (Master's thesis). National Chung Cheng University, Chia-yi.

Scholarships and Awards

The Scholarship of Government Sponsorship for Overseas Study (2019): 30,000 USD tuition and 20,000-17,000 USD stipend each year - up to 4 years

Second prize winner in 2018 Pixnet-Hackathon: A.I. Image Generation

First prize winner in 2016 Pixnet-Hackathon: A.I. Cloze
The competition aimed at a best artificial intelligent algorithm to answer cloze questions precisely and fast.

Clinical Skills

Psychotherapy, Psychological assessment,
Biofeedback, Polysomnography

Computer Skills

SAS, Matlab, Psychtoolbox, TensorFlow, EEGlab/ERPlab, SPM, FSL, FreeSurfer, Fieldtrip, MNE, Nilearn, E-prime, R, Python, C/C++, Git, Docker, Django, JavaScript, LaTeX

Languages

Taiwanese, Mandarin, English