# Feng-Chun (Ben) Chou

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## **ABOUT ME**

I am currently a PhD student under supervision by Andy Chen at CHENLab. My research interests focus on using various multimodal methods (e.g., fMRI, Social Network, Nonverbal behavior, etc.) combined with Naturalistic Paradigms to deconstruct the complex mechanisms behind Interacting Minds and understand the emergent properties generated by human interactions.

#### **EDUCATION**

National Taiwan University, Taipei, Taiwan

2023 - present

Ph.D. in Psychology

National Taiwan University, Taipei, Taiwan

2017 - 2022

B.Sc. in Physics

### **RESEARCH INTERESTS**

Interacting Minds, Social Network Analysis, Computational Social Neuroscience, Machine Learning & Nonverbal Behaviors.

#### **PUBLICATIONS**

Hsiao, P.-Y. A., Kim, M. J., **Chou, F.-C. B.**, & Chen, P.-H. A. (2024). Intersubject representational similarity analysis uncovers the impact of state anxiety on brain activation patterns in the human extrastriate cortex. *Brain Imaging and Behavior*, 18(2), 1-9. https://doi.org/10.1007/s11682-024-00854-1

#### MANUSCRIPTS UNDER REVIEW

**Chou, F.-C. B.,\*** Chen, Y.-C. C.,\* Kuo, Y.-S. A., Hsiao, P.-Y. A., Lin, C. R., Huang, Y.-W. Y., Peng, W.-L., Pan, H.-J. S., & Chen, P.-H. A. (Under revision). Facial insights: An exploration of similarity in spontaneous facial behaviors during pandemic lockdown. *PsyArXiv*. https://doi.org/10.31234/osf.io/46dvn

<sup>\*</sup> indicates co-first authorship.

Kuo, Y.-S. A.,\* **Chou, F.-C. B.,\*** & Chen, P.-H. A. (Under review). Social isolation strengthens the association between intersubject similarity in fantasy and similarity in affective appraisal. *PsyArXiv*. https://doi.org/10.31234/osf.io/64bjc

## **INVITED TALKS**

**Symposium Talk**, From divergent opinions to aligned impressions: The power of shared experiences *Taiwanese Psychological Association 2024 Annual Conference*, Taipei, Taiwan

**Blitz Topic**, From Opposing Views to Aligned Impressions: Shared Experiences Matter. *Social & Neuroscience Society 2024 Annual Conference*, Toronto, Canada

**Symposium Talk**, Intersubject representational similarity analysis uncovers individual variations in experiencing effortful self-control. *Taiwanese Society of Cognitive Neuroscience 2023 Annual Conference*, Taoyuan, Taiwan

**Symposium Talk**, Intersubject representational similarity analysis uncovers individual variations in experiencing effortful self-control. 12<sup>th</sup> Conference for Chinese Psychologists, Taipei, Taiwan

**Symposium Talk**, Intersubject representational similarity analysis uncovers individual variations in experiencing effortful self-control. *Taiwanese Psychological Association 2023 Annual Conference*, Hsinchu, Taiwan

#### **CONFERENCE PRESENTATIONS**

- Hsiao, P.-Y. A., Kim, M. J., **Chou, F.-C. B.**, & Chen, P.-H. A. (2024). Intersubject representational similarity analysis uncovers the impact of state anxiety on brain activation patterns in the human extrastriate cortex. *Organization for Human Brain Mapping 2024 Annual meeting*, Seoul, Korea.
- Chou, F.-C. B., Kuo, Y.-S. A., Chen, Y.-C. C., Chang, C.-Y. E., & Chen, P.-H. A. (2024). From Opposing Views to Aligned Impressions: Shared Experiences Matter. *Social & Neuroscience Society 2024 Annual Conference*, Toronto, Canada
- **Chou, F.-C. B.**, Chiu, T.-A. P., Hsiao, P.-Y. A., Chang, C.-Y. E., & Chen, P.-H. A. (2024). Unraveling the neural representations of preference with a naturalistic neuroimaging approach. *Cognitive Neuroscience Society 2024 Annual meeting*, Toronto, Canada.
- Chang, C.-Y. E., **Chou, F.-C. B.**, & Chen, P.-H. A. (2023). Exploring cross-domain text semantic similarity using large language models. *Taiwanese Psychological Association 2023 Annual Conference*, Hsinchu, Taiwan.
- Chen, P.-H. A., Kuo, Y.-S. A., & **Chou, F.-C. B.** (2023). Social isolation strengthens the association between intersubject similarity in fantasy and similarity in affective appraisal. *The 15th Biennial Conference of the Asian Association of Social Psychology*, Hong Kong.
- Chen, P.-H. A., Hsiao, P.-Y. A., Peng, W.-L., Chen, Y.-Z. N., & **Chou, F.-C. B.** (2023). Cross-modality models uncover differential psychological processes driven by polarized ideology. *Social & Affective Neuroscience Society 2023 Annual Conference*, Santa Barbara, CA.
- Chen, P.-H. A., Kuo, Y.-S. A., **Chou, F.-C. B.**, & Chen, Y.-C. C. (2023). The dark side of shared

- experience: its amplification effect on out-group hate. Shared Reality Preconference, Society for Personality and Social Psychology 2023 Annual Meeting.
- **Chou, F.-C. B.**, Hsiao, P.-Y. A., Jolly, E., Chang, L.J., & Chen, P.-H. A. (2022). Taking a naturalistic neuroimaging approach to examine shared responses across cultures. *Social & Affective Neuroscience Society 2022 Virtual Conference*.
- **Chou, F.-C. B.**, Pan, H.-J. S., Huang, Y.-W. Y., Kuo, Y.-S. A., Chen, Y.-C. C., Hsiao, P.-Y. A., Lin, C. R., & Chen, P.-H. A. (2022). Collective synchronization of emotional expressions under a large-scale social stressor. *Society for Affective Science 2022 Virtual Conference*.
- Lee, W.-T. W., **Chou, F.-C. B.**, Lin, C. R., & Chen, P.-H. A. (2022). Taking a machine-learning approach to predict loneliness. *60th Anniversary of Taiwanese Psychological Association Conference*.
- Chen, Y.-Z. N., Hsiao, P.-Y. A., **Chou, F.-C. B.**, & Chen, P.-H. A. (2022). Cultural differences in preferences. *60th Anniversary of Taiwanese Psychological Association Conference*.
- Chiu, T.-A. P., **Chou, F.-C. B.**, Kuo, Y.-S. A., & Chen, P.-H. A. (2022). Facial synchrony during naturalistic viewing. 2022 NTU Neurobiology and Cognitive Science Center Summer Internship Conference.
- Chen, Y.-Z. N., Hsiao, P.-Y. A., **Chou, F.-C. B.**, & Chen, P.-H. A. (2022). Cultural differences in preferences. *2022 NTU Neurobiology and Cognitive Science Center Summer Internship Conference*.
- Pan, H.-J. S., **Chou, F.-C. B.**, Huang, Y.-W. Y., Kuo, Y.-S. A., Chen, Y.-C. C., Hsiao, P.-Y. A., Lin, C. R., & Chen, P.-H. A. (2022). Synchronization of facial behaviors under and after a large-scale social stressor. *Social & Affective Neuroscience Society 2022 Virtual Conference*.
- Kuo, Y.-S. A., Huang, Y.-W. Y., **Chou, F.-C. B.**, Chen, Y.-C. C., Hsiao, P.-Y. A., Lin, C. R., Pan, H.-J. S., & Chen, P.-H. A. (2022). Social isolation enhances the effect of fantasy on appraising affective experiences. *Social & Affective Neuroscience Society 2022 Virtual Conference*.
- Hsiao, P.-Y. A., **Chou, F.-C. B.**, Lin, Y.-J., Jolly, E., Chang, L.J., & Chen, P.-H. A. (2022). Intersubject representational similarity analysis reveals individual variations in affective experience transcending cultural differences. *Social & Affective Neuroscience Society 2022 Virtual Conference*.
- Huang, Y.-W. Y., Kuo, Y.-S. A., **Chou, F.-C. B.**, Chen, Y.-C. C., Hsiao, P.-Y. A., Lin, C. R., Pan, H.-J. S., & Chen, P.-H. A. (2022). Differential impacts of dual identities on Taiwanese affective preferences. *Society for Affective Science 2022 Virtual Conference*.
- Chen, Y.-C. C., Huang, Y.-W. Y., Kuo, Y.-S. A., **Chou, F.-C. B.**, Hsiao, P.-Y. A., Lin, C. R., Pan, H.-J. S., & Chen, P.-H. A. (2022). Large-scale stressors facilitate divergent interpretations toward ambiguous naturalistic contents. *Society for Affective Science 2022 Virtual Conference*.
- Kuo, Y.-S. A., Huang, Y.-W. Y., **Chou, F.-C. B.**, Chen, Y.-C. C., Hsiao, P.-Y. A., Lin, C. R., Pan, H.-J. S., & Chen, P.-H. A. (2022). Social isolation enhances the effect of fantasy on appraising affective experiences. *Society for Affective Science 2022 Virtual Conference*.
- Hsiao, P.-Y. A., **Chou, F.-C. B.**, Lin, Y.-J., Jolly, E., Chang, L.J., & Chen, P.-H. A. (2022). Intersubject representational similarity analysis reveals individual variations in affective experience transcending cultural differences. *Society for Affective Science 2022 Virtual Conference*.
- Chen, P.-H. A., Lin, C. R., & **Chou, F.-C. B.** (2022). The paradox of being unique in an interdependent culture. *Society for Affective Science 2022 Virtual Conference*.
- Chen, P.-H. A., Lin, C. R., & Chou, F.-C. B. (2022). The paradox of being unique in an interde-

pendent culture. Advances in Cultural Psychology Preconference, Society for Personality and Social Psychology 2022 Annual Meeting.

**Chou, F.-C. B.**, & Chen, P.-H. A. (2021). Self-awareness impacts individual variations in perceiving appetitive cues. *Cognitive Neuroscience Society 2021 Virtual Conference*.

Chen, Y.-C. C., **Chou, F.-C. B.**, & Chen, P.-H. A. (2020). Inhibitory training impacts the transition probability across multiple temptation-related states. *Taiwanese Psychological Association Annual Meeting, Virtual Conference*.

#### **TECHNICAL SKILLS**

**Programming:** Machine-learning & Deep-learning (Scikit-learn, Pytorch, TensorFlow), Neuroimaging (Nltools, Nilearn, BrainIAK, fMRIPrep), Non-verbal behavior analysis (Py-Feat, Open-Face, Open-Pose), Computational modeling (Numpy, Pandas, R, pymer4, Seaborn, SciPy, MAT-LAB), Web & Server programming (JavaScript, Meteor, Node.js, BASH, Socket, SQL), Network analysis (NetworkX), Neurophysiological Signal Processing (NeuroKit), Java, C, C++

**Data Analysis:** RSA (Representational Similarity Analysis), IS-RSA (Intersubject Representational Similarity Analysis), SNA (Social Network Analysis), ML & DL (Machine Learning & Deep Learning), TPA (Transition Probability Analysis), ANOVA, GLM, HMM (Hidden Markov Model), Information theory, Linear algebra, Group theory