

Dr. Jianghao Liu

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Age: 32



PROFESSIONAL CAREER

Corporate Science & Research , Dassault Systèmes,

Permanent contract (CDI), Living brain technology specialist

Oct 2018 – now (6 years), Paris, France

Research internship

Feb - Jul 2018, Paris, France

PUBLICATION

1. **Liu, J.**, Zhan, M., Hajhajate, D., Spagna, A., Dehaene, S., Cohen, L., & Bartolomeo, P. (2025). Visual mental imagery in typical imagers and in aphantasia: A millimeter-scale 7-T fMRI study. *Cortex*
2. **Liu, J.**, Bayle, D. J., Spagna, A., Sitt, J. D., Bourgeois, A., Lehongre, K., Fernandez-Vidal, S., Adam, C., Lambrecq, V., Navarro, V., Seidel Malkinson, T., & Bartolomeo, P. (2023). Fronto-parietal networks shape human conscious report through attention gain and reorienting. *Communications Biology*, 6(730), Article 1.
3. **Liu, J.**, & Bartolomeo, P. (2023). Probing the unimaginable: The impact of aphantasia on distinct domains of visual mental imagery and visual perception. *Cortex*, 166, 338–347.
4. **Liu, J.**, Spagna, A., & Bartolomeo, P. (2022). Hemispheric asymmetries in visual mental imagery. *Brain Structure and Function*, 227(2), 697–708.
5. **Liu, J.**, & Bartolomeo, P. (2023). The model-resistant richness of human visual experience. *Behavioral and Brain Sciences*.
6. Bartolomeo, P., Hajhajate, D., **Liu, J.** & Spagna, A. (2020) Assessing the causal role of early visual areas in visual mental imagery. *Nature Reviews Neuroscience*
7. Bartolomeo, P., **Liu, J.**, & Malkinson, T. S. (2024). Frontoparietal asymmetries leading to conscious perception. *Trends in Cognitive Sciences*.
8. Seidel Malkinson, T., Bayle, D. J., Kaufmann, B. C., **Liu, J.**, Bourgeois, A., Lehongre, K., ... & Bartolomeo, P. (2024). Intracortical recordings reveal vision-to-action cortical gradients driving human exogenous attention. *Nature Communications*, 15(1), 2586.
9. Bartolomeo, P., **Liu, J.**, & Spagna, A. (2024). Colors in the mind's eye. *Cortex*, 170, 26-31.
10. Spagna, A., Heidenry, Z., Miselevich, M., Lambert, C., Eisenstadt, B. E., Tremblay, L., ..., **Liu** & Bartolomeo, P. (2023). Visual mental imagery: evidence for a heterarchical neural architecture. *Physics of Life Reviews*.
11. Hajhajate, D., Kaufmann, B. C., **Liu, J.** et al. The connectional anatomy of visual mental imagery: evidence from a patient with left occipito-temporal damage. *Brain Structure and Function* (2022).
12. Spagna, A., Bayle, D., Romeo, Z., Seidel-Malkinson, T., **Liu, J.** et al. The cost of attentional reorienting on conscious visual perception: an MEG study. *Cerebral Cortex* (2022).
13. Spagna, A., Hajhajate, D., **Liu, J.** & Bartolomeo, P. Visual mental imagery engages the left fusiform gyrus, but not the early visual cortex: A meta-analysis of neuroimaging evidence. *Neuro & Biobeh Reviews* (2021).

EDUCATION

Postdoctoral researcher in cognitive neuroscience

PICNIC lab, Institut du Cerveau – Paris Brain Institute (ICM)

Dec.2023 - Now

Paris, FR

Visiting scholar

Columbia University, Zuckerman brain institute

Sep.2023 –Nov.2023

New York, USA

PhD Candidate in cognitive neuroscience

PICNIC lab, Institut du Cerveau – Paris Brain Institute (ICM)

Sep.2019 -Dec.2023

Paris, FR

MSc. Bioengineering in Neuroscience

ParisTech – ESPCI & Université Paris Descartes

Sep.2017- Oct.2018

Paris, FR

Engineering diploma in Mechanics

ParisTech - Arts et Métiers (ENSAM)

Sep.2015- Oct.2018

Paris, FR

AWARD

1. “European Workshop on Cognitive Neuropsychology Prize”, Early career award, 2023, Bressanone, Italy.
2. “Next frontiers in consciousness research”, Travel grant, 2023, NIH, Bethesda, United states.
3. “Carnot training grant” for visiting scholar in Columbia university in NYC, 2023, ICM, France.

Scientific communications

1. Liu, J., Zhan, M., Hajhajate, D., Spagna, A., Dehaene, S., Cohen, L., & Bartolomeo, P. (2023). The mind / brain's eye: Ultra-high field fMRI of visual mental imagery. Next frontiers in consciousness research workshop, NIH, Bethesda, United states.
2. Liu, J., Zhan, M., Hajhajate, D., Spagna, A., Dehaene, S., Cohen, L., & Bartolomeo, P. (2023). The mind/brain's eye: Ultra-high field fMRI of visual mental imagery. 26th ASSC, New York, United states.
3. Liu, J., Zhan, M., Hajhajate, D., Spagna, A., Dehaene, S., Cohen, L., & Bartolomeo, P. (2023). The mind/brain's eye: Ultra-high field fMRI of visual mental imagery. European Workshop on Cognitive Neuropsychology, Bressanone, Italy.
4. Liu, J., Bayle, D. J., Spagna, A., Sitt, J. D., Bourgeois, A., Lehongre, K., Fernandez-Vidal, S., Navarro, V., Adam, C., Lambrecq, V., Malkinson, T. S., & Bartolomeo, P. (2022). Attend and be aware: Neural interactions between attentional enhancement, reorienting and conscious perception. HBP Symposium: From Cortical Microcircuits to Consciousness, Paris, France.
5. Liu, J., Bayle, D. J., Spagna, A., Sitt, J. D., Bourgeois, A., Lehongre, K., Fernandez-Vidal, S., Navarro, V., Adam, C., Lambrecq, V., Malkinson, T. S., & Bartolomeo, P. (2022). Exogenous attention interacts with conscious perception: Evidence from human intracerebral recordings. FENS Forum of Neuroscience, Paris, France.

DIVERS

Languages

French Bilingual

English Bilingual

Chinese Native