

LIST OF ALL PUBLICATIONS

- 1) De Vitis M., Filippini M., Hadjidimitrakis K., Vaccari E.F., Diomedi S., Gamberini M., Gori M., Testa M., Galletti C., Fattori P. (2025) The medial fronto-parietal network of the macaque: different specializations for spatial parameters of reaching? *Neuroimage* 318(2025) 121387. Doi: 10.1016/j.neuroimage.2025.121387.
- 2) Buonfiglio, A. R., Diomedi, S., Filippini, M., Fattori, P., & Stoianov, I. P. (2025). Dynamic Predictive Spatial Encoding of Motor Intentions In Area V6A of the Posterior Parietal Cortex. *BioRxiv*, 1–32. <https://doi.org/10.1101/2025.02.06.636800>
- 3) Diomedi, S., Vaccari, F. E., Hadjidimitrakis, K., Fattori, P., & Stoianov, I. P. (2025). Integration of Motor Planning and Execution through Latent Structure Reorganization in the Posterior Parietal Cortex. *Biorxiv*. <https://doi.org/10.1101/2025.06.10.658832>
- 4) Priorelli, M and Stoianov I.P. (2025) Deep Hybrid Models: Infer and Plan in a Dynamic World, *Entropy*, 27(6), 570; <https://doi.org/10.3390/e27060570>
- 5) Priorelli, M., Stoianov I.P., Pezzulo G., (2025). Embodied decisions as active inference, *PLoS Comput Biol* 21(6): e1013180. <https://doi.org/10.1371/journal.pcbi.1013180>
- 6) Foglino C., Watson T., Stein N., Fattori P., Bosco A. (2025) The effect of viewing-only, reaching, and grasping on size perception in virtual reality. *PLoS One* 20(6): e0326377. <https://doi.org/10.1371/journal.pone.0326377>
- 7) Severitt B.R., Sauer Y., Castner N.J., Fuhl W., and Wahl S. (2025). Recognition of errors in gaze-based interaction with anomaly detection. In Proceedings of the 2025 Symposium on Eye Tracking Research and Applications (ETRA '25). Association for Computing Machinery, New York, NY, USA, Article 77, 1–6. <https://doi.org/10.1145/3715669.3725895>
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- 9) Taravat A., Lappe M., De Lussanet M.H.E. (2025) Where does gaze lead? Integrating gaze and motion for enhanced 3D pose estimation. Proceedings 2025 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops Vrw 2025, 2025, pp. 76–83.
- 10) Severitt B.R., Sauer Y., Neugebauer A., Agarwala R., Castner N., Wahl S. (2025) The interplay of user preference and precision in different gaze-based interaction methods in virtual environments. *Front. Virtual real.* 6:1576962. Doi 10.3389/frvir.2025.1576962.
- 11) Breveglieri R., Brandolani R., Galletti C., Avenanti A., Fattori P. (2025) Time-dependent enhancement of corticospinal excitability during cortico-cortical paired associative stimulation of the hV6A-M1 network in the human brain. *NeuroImage* 2025 3 June 2025, 121301. <https://doi.org/10.1016/j.neuroimage.2025.121301>
- 12) Breveglieri R., Brandolani R., Diomedi S., Lappe M., Galletti C., Fattori P. (2025) Role of the medial posterior parietal cortex in orchestrating attention and reaching. *J Neurosci.* 2025 Jan 1;45(1): e0659242024. doi: 10.1523/JNEUROSCI.0659-24.2024.
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- 14) Priorelli, M., Stoianov, I.P., Pezzulo, G. (2025). Learning and Embodied Decisions in Active Inference. In: Buckley, C.L., et al. Active Inference. *IWAI 2024. Communications in Computer and Information Science*, vol 2193. Springer, Cham. https://doi.org/10.1007/978-3-031-77138-5_5
- 15) Severitt BR, Castner N, Wahl S (2024) Bi-directional gaze-based communication: a Review. *Multimodal Technologies and Interaction*, 2024, 8(12), 108.
- 16) Pezzulo G., D'Amato L., Mannella F., Priorelli M., Van de Maele T., Stoianov I.P., Friston K. (2024) Neural representation in active inference: using generative models to interact with and understand lived world. *Ann N Y Acad Sci*; 1534(1): 45-68. doi: 10.1111/nyas.15118.
- 17) Sauer Y, Agarwala R, Lenhart P,....Castner NJ, Wahl S (2024) Eye tracking data set of academics making an omelette: an egg-breaking work. Conference paper, Eye tracking research and application symposium (ETRA), 2024, 40.
- 18) Sauer Y, Severitt B, Agarwala R, Wahl S (2024) Using mobile eye tracking for gaze- and head-contingent vision simulations. Eye tracking research and application symposium (ETRA), 2024, 51.
- 19) Sarasola-Sanz A, Ray AM, Insausti-Delgado A, Irastorza-Landa N, Mahmoud WJ, Brötz D, Bibián-Nogueras C, Helmhold F, Zrenner C, Ziemann U, López-Larraz E and Ramos-Murguialday A (2024), A hybrid brain-muscle-machine interface for stroke rehabilitation: Usability and functionality validation in a 2-week intensive intervention. *Front. Bioeng. Biotechnol.* 12:1330330. doi: 10.3389/fbioe.2024.1330330
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- 21) Priorelli M., Maggiore F., Maselli A., Donnarumma F., Maisto D. Mannella F., Stoianov I.P. (2024) Modeling Motor Control in Continuous Time Active Inference: A Survey. in *IEEE Transactions on Cognitive and Developmental Systems*, vol. 16, no. 2, pp. 485-500, April 2024, doi: 10.1109/TCDS.2023.3338491.
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- 23) Heins F, Lappe M (2024) Oculomotor behavior can be adjusted on the basis of artificial feedback signals indicating externally caused errors. *PLoS ONE* 19(5): e0302872. <https://doi.org/10.1371/journal.pone.0302872>
- 24) Bremer G, Lappe M (2024) Predicting locomotion intention using eye movements and EEG with LSTM and transformers. Conference paper, *Proceedings – 2024 IEEE International Symposium on Mixed and Augmented Reality, ISMAR 2024*, pp. 21-30.
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- 30) Castner, N., Arsiwala-Scheppach, L., Mertens, S., Krois J., Thaqi E., Kasneci E., Wahl S., Schwendicke F. (2024) Expert gaze as a usability indicator of medical AI decision support systems: a preliminary study. *npj Digit. Med.* 7, 199 (2024). <https://doi.org/10.1038/s41746-024-01192-8>.
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