Curriculum Vitae

Hamed Nili is a postdoctoral researcher at the Excellence Department of Neural Information Processing at UKE, Hamburg.

Hamed did his BSc in Electrical engineering in Iran. He then moved to Southampton to do an MSc in applied digital signal processing. This was followed by a research assistant in Professor John Duncan's lab and then a PhD in Niko Kriegeskorte's lab in the University of Cambridge. He then did a postdoc with Professor Christopher Summerfield and another postdoc in the Welcome centre for Integrative Neuroimaging both at the University of Oxford.

Hamed is interested how the brain processes information. To that end, he has been developing novel methods and applying them to real data in order to gain new insight into brain function.
Having used machine learning methods in his previous research, he is excited to apply information-theoretic measures to neural data!

Key publications

Stokes, M. G., Kusunoki, M., Sigala, N., Nili, H., Gaffan, D., & Duncan, J. (2013). Dynamic coding for cognitive control in prefrontal cortex. *Neuron*, *78*(2), 364-375.

Nili, H., Wingfield, C., Walther, A., Su, L., Marslen-Wilson, W., & Kriegeskorte, N. (2014). A toolbox for representational similarity analysis. *PLoS computational biology*, *10*(4), e1003553.

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Barron, H. C., Reeve, H. M., Koolschijn, R. S., Perestenko, P. V., Shpektor, A., Nili, H., ... & Dupret, D. (2020). Neuronal computation underlying inferential reasoning in humans and mice. *Cell*, *183*(1), 228-243.

Basti, A., Nili, H., Hauk, O., Marzetti, L., & Henson, R. N. (2020). Multi-dimensional connectivity: a conceptual and mathematical review. *NeuroImage*, 117179.

Luyckx, F., Nili, H., Spitzer, B., & Summerfield, C. (2019). Neural structure mapping in human probabilistic reward learning. *ELife*, *8*, e42816.

Shahbazi, M., Shirali, A., Aghajan, H., & Nili, H. (2021). Using distance on the Riemannian manifold to compare representations in brain and in models. *NeuroImage*, 118271.

Nili, H., Walther, A., Alink, A., & Kriegeskorte, N. (2020). Inferring exemplar discriminability in brain representations. *Plos one*, *15*(6), e0232551.

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Karimi-Rouzbahani, H., Woolgar, A., Henson, R. N., & Nili, H. (2021). Caveats and nuances of model-based and model-free representational connectivity analysis. *bioRxiv*.