

## Xiao-Xiong LIN

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CONTACT INFORMATION	In.xxng@gmail.com	XiaoXiongLin.com
EDUCATION	<b>Ludwig-Maximilian University of Munich</b> , Munich, Germany	
	Fast-track PhD, Computational and Systems Neuroscience, Oct. 2016 – Sept. 2023	
	<b>Peking University</b> , Beijing, P.R.China	
	B.S., Cognitive Neuroscience , GPA: 3.6/4.0	July 2016
	B.A., Art	July 2017
RESEARCH EXPERIENCE	<b>Postdoctoral Research</b>	Oct. 2023 – Jan. 2024
	Department of Neurosurgery, Technical University of Munich	
	Advisors: Prof. Simon Jacob	
	• data analysis of chronic calcium imaging of mice during task acquisition	
	<b>PhD Research Project</b>	Apr. 2018 – Sept. 2023
	Department of Neurosurgery, Technical University of Munich	
	Advisors: Prof. Simon Jacob, Prof. Christian Leibold, Prof. Moritz Grosse-Wentrup	
	• population-level neural coding for working memory and flexible behavior	
	<b>Research Project</b>	Oct. 2017 – Mar. 2018
	Faculty of Philosophy, Philosophy of Science and Religious Studies, Ludwig-Maximilian University of Munich	
	Advisor: Prof. Ophelia Derooy	
	• Contextual value representation	
	<b>Research Project</b>	Apr. 2017 – Aug. 2017
	Technical University of Munich	
	Organizer: Prof. Jorg Conradt	
	• Image segmentation using convolutional neural networks	
	<b>Research Project</b>	Mar. 2017 – May 2017
	Graduate School of Systemic Neuroscience, Ludwig-Maximilian University of Munich	
	Advisor: Prof. Christian Leibold	
	• Computational modeling of hippocampal representation of space	
	<b>Research Assistant</b>	May 2014 – July 2016
	School of Psychological and Cognitive Sciences, Peking University	
	Advisors: Prof. Yan Bao and Prof. Ernst Pöppel	
	• Frequency modulated analytic and holistic processing modes of auditory temporal order perception	
	• Temporal information processing in poetry appreciation	
	• Temporal integration indexed by mismatch negativity (EEG)	
TEACHING	Teaching Assistant, Neuromatch Academy	
	• deep learning	Aug 2021
	• methods in computational neuroscience	Aug 2020

Instructor, ViaX online education  
• perception and cognition

Nov 2016 – Oct 2018

AWARDS	Graduate School of Systemic Neuroscience, University of Munich	
	• Doctoral scholarship	2017
	Peking University	
	• Award for Excellence in Research	2015
	• Research Grant from President's Foundation	2014
	• Award for Excellence in Courses	2013
	China Computer Federation	
	• First Award in 17th National Olympiad in Informatics in Provinces (awarded <1.5%)	2011

PUBLICATIONS	Computational and systems neuroscience	
	1. <b>Lin, X.-X.</b> , Nieder, A., Jacob, S.N. (2023). The neuronal implementation of representational geometry in primate prefrontal cortex. <i>Science Advances</i> .	
	2. Eisenkolb, V. M., Held, L. M., Utzschmid, A., <b>Lin, X.-X.</b> , Krieg, S. M., Meyer, B., ... & Jacob, S. N. (2023). Human acute microelectrode array recordings with broad cortical access, single-unit resolution and parallel behavioral monitoring. <i>Cell Reports</i> .	
	Cognitive neuroscience	
	1. Zhang, Z.; <b>Lin, X.</b> ; Bao, Y.. (2023). Holistic temporal order judgment of tones requires top-down disentanglement. <i>PsyCh Journal</i> , 12(4), 491-499.	
	2. Bao, Y., Pöppel, E., Wang, L., <b>Lin, X.</b> , Yang, T., Avram, M., ... Vedder, A. (2015). Synchronization as a biological, psychological and social mechanism to create common time: a theoretical frame and a single case study. <i>PsyCh Journal</i> , 4(4), 243-254.	
	3. Bao, Y., Yang, T., <b>Lin, X.</b> , & Pöppel, E. (2016). Donders revisited: Discrete or continuous temporal processing underlying reaction time distributions? <i>PsyCh Journal</i> , 5(3), 177-179.	
	4. Wang, L., Bao, Y., Zhang, J., <b>Lin, X.</b> , Yang, L., Pöppel, E., & Zhou, B. (2016). Scanning the world in three seconds: Mismatch negativity as an indicator of temporal segmentation. <i>PsyCh Journal</i> , 5(3), 170-176.	
	5. Wang, L., <b>Lin, X.</b> , Zhou, B., Pöppel, E., & Bao, Y. (2015). Subjective present: a window of temporal integration indexed by mismatch negativity. <i>Cognitive Processing</i> , 16(1), 131-135.	
	6. Wang, L., <b>Lin, X.</b> , Zhou, B., Pöppel, E., & Bao, Y. (2016). Rubberband effect in temporal control of mismatch negativity. <i>Frontiers in Psychology</i> , 7.	
	Neural aesthetics	
	1. Bao, Y., Yang, T., Zhang, J., Zhang, J., <b>Lin, X.</b> , Paolini, M., ... & Silveira, S. (2017). The "third abstraction" of the Chinese artist LaoZhu: Neural and behavioral indicators of aesthetic appreciation. <i>PsyCh Journal</i> , 6(2), 110-119.	
2. Bao, Y., Yang, T., <b>Lin, X.</b> , Fang, Y., Wang, Y., Pöppel, E., & Lei, Q. (2016). Aesthetic Preferences for Eastern and Western Traditional Visual Art: Identity Matters. <i>Frontiers in Psychology</i> , 7.		

CONFERENCE PRESENTATIONS	<ol style="list-style-type: none"> <li>1. <b>Lin, X.</b>, Jacob, S.N.(2022). Neuronal implementation of the representational geometry in prefrontal working memory. Poster at Cosyne. Lisbon, Portugal.</li> <li>2. <b>Lin, X.</b> Nieder, A., Jacob, S.N.(2019). Reorganization of working memory coding after distraction by switching of target- selective populations in primate prefrontal cortex. Poster at SfN Society for Neuroscience, Chicago, IL, US.</li> <li>3. <b>Lin, X.</b>, Wang, L., Mo, C., Bao, Y.(2015). Volume of precuneus predicts overall appreciation of abstract art. Poster at Vision Science of Art Conference, Liverpool, U.K.</li> <li>4. <b>Lin, X.</b>, Wang, L., Bao, Y.(2015). Time aesthetics: a temporal integration window of poetic prosody. Poster at Conference of Deutsche Gesellschaft für Medizinische Psychologie (German Association of Medical Psychology), Munich, Germany</li> </ol>
SKILLS	<p>Coding</p> <ul style="list-style-type: none"> <li>• proficient: Python (Numpy, Pytorch, Scikit-learn, Tensorflow, Matplotlib)</li> <li>• have experience: MatLab, C++ and (html+css+JavaScript )</li> </ul> <p>Language</p> <ul style="list-style-type: none"> <li>• Mandarin Chinese (native), English (fluent), German (good command)</li> </ul> <p>Others</p> <ul style="list-style-type: none"> <li>• Video editing</li> </ul>
AUDIO-VISUAL PRODUCTIONS	<p>Video productions at Pearvideo</p> <ul style="list-style-type: none"> <li>• Habitants of Chernobyl <span style="float: right;">Chernobyl, Ukraine, 2019</span></li> <li>• Hallstatt, the plagiarized town <span style="float: right;">Hallstatt, Austria, 2018</span></li> <li>• Documenta 14 on-site reporting <span style="float: right;">Kassel, Germany, 2017</span></li> </ul> <p>Vice chair, TV Station of Peking University <span style="float: right;">Mar 2014 – Mar 2015</span></p> <ul style="list-style-type: none"> <li>• Supervise TV program making</li> <li>• Produced corporate video</li> </ul>
ARTISTIC WORK	<p>Hidalgo Collective <span style="float: right;">Nov 2022 – present</span></p> <ul style="list-style-type: none"> <li>• facial expression recognition web app for concert "Who Are You" (2023)</li> <li>• stage design for classical music concerts</li> <li>• conceptual art</li> <li>• AI technology support</li> </ul> <p>PKU Drama Society <span style="float: right;">Sept 2012 – July 2016</span></p> <ul style="list-style-type: none"> <li>• Director, <i>The Ghost Sonata</i> (2016) <span style="float: right;">Beijing, China</span></li> <li>• Actor, <i>the 3rd International Youth Classical Drama Festival</i> (2014) <span style="float: right;">Messini, Greece</span></li> <li>• Actor, <i>Beijing International Youth Drama Festival</i> (2014) <span style="float: right;">Beijing, China</span></li> <li>• Instructor of actor training</li> </ul>
REFERENCES	<p><b>Prof. Simon Jacob</b>  Translational NeuroTechnology Lab  Technical University of Munich  Ismaninger Str. 22  81675 Munich  Germany  Phone: +49 (89) 4140-7636</p>

Email: [simon.jacob@tum.de](mailto:simon.jacob@tum.de)  
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Relationship: PhD supervisor

**Prof. Christian Leibold**

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Website: <https://www.neurotheory.uni-freiburg.de/>  
Relationship: PhD thesis advisor, lab rotation supervisor, mentor

**Prof. Ernst Pöppel**

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Website: <https://www.ernst-poepfel.com/>  
Relationship: Collaborator, mentor