

<b>School/Department:</b>	ERIM / RSM / Marketing Management
<b>Project Title:</b>	<b>Decoding emotions from the consumer's brain</b>
<b>Abstract:</b>	<p>We seek an outstanding applicant whose research interests lie at the intersection of psychology, economics, marketing and neuroscience and who is interested in studying the brain mechanisms that underlie judgement and decision-making. Particular interests of our consumer neuroscience group are the neural underpinnings of persuasive messaging, social influences on choice, the role of affect in decision-making and (dis)honesty. In particular, we focus on linking neural measures obtained from individuals to real market-level choice data. However, candidates have a large say in the precise focus of their project.</p> <p>Experience with EEG and/or fMRI is required for this position. Applicants who are interested in applying neural data analysis to study (real-world) choice behaviour of consumers are particularly encouraged to apply.</p> <p>Experience or interest in more advanced techniques, such as multi-variate pattern analysis (MVPA), representational similarity analysis (RSA), classification algorithms, prediction models, or other multivariate approaches to EEG/fMRI data analyses is a definite plus.</p> <p>In addition to fMRI and EEG, we make use of eye-tracking, facial coding, and behavioural measures in our research.</p> <p>For the current position, we are particularly looking for candidates with experience with EEG research, to extend our line of research into the decoding of emotional experience in response to video (messages) such as TV commercials or movies. See Eijlers, Smidts, Boksem (2019; 2020), Chan et al. (2020).</p> <p>The <a href="#">Erasmus Center for Neuroeconomics</a> is embedded in the marketing group at Rotterdam School of Management (RSM), which ranks among the best in the world. Our members publish their research in top journals in marketing as well as related fields. They deeply care about open science practices (e.g., data sharing and open-source software), and frequently host seminars to encourage knowledge exchange. The group is diverse (in terms of research interests and cultural background), collaborative, and collegial.</p>

	<p>Through workshops, research seminars, applied and theoretical research with faculty, and seminars on key disciplines that provide the foundations of the marketing discipline (statistics, economics, psychology) the PhD student will gain the requisite experience for independent work. The actual project will be defined by the student and the supervisory group and thus requires creativity, self-direction, and passion for top-notch scientific research.</p> <p><b>Students have access to world-class research facilities:</b></p> <ul style="list-style-type: none"> <li>• Erasmus Behavioural Lab provides facilities to conduct high-quality behavioural research, including sound-insulated cubicles, group labs, video labs, and facilities for eye tracking, EEG/ERP, facial coding, and hormone-administration studies.</li> <li>• High-performance computing is available to researchers via SURFSara (a Dutch consortium for scientific computing)</li> <li>• Researchers have access to multiple MRI scanners via Erasmus Medical Centre.</li> </ul> <p><b>We facilitate international research experience:</b></p> <p>To strengthen their international research networks and complement their time at RSM, PhD students receive funding for a 3- to 6-month research visit at a top international university. Past visits have included Stanford, Wharton, Harvard, Florida, Chicago, Colorado, Cornell, Columbia, and UCLA.</p>
<p><b>Requirements of candidate:</b></p>	<p><b>We seek candidates with the following qualities:</b></p> <ul style="list-style-type: none"> <li>• Intellectual curiosity, eagerness to learn, and openness to criticism and other perspectives</li> <li>• Strong commitment to methodological rigor and scientific integrity</li> <li>• Strong motivation to pursue an international career as a leading scholar</li> <li>• Excellent speaking and writing ability in fluent English, ideally with experience writing for a scientific audience</li> <li>• Willingness and motivation to independently formulate research projects and carry them through to completion</li> <li>• Excellent organizational skills</li> <li>• Masters' degree (preferably a Research Master's or MPhil degree)</li> </ul> <p><b>Candidates should further match the following profile:</b></p> <ul style="list-style-type: none"> <li>• Background in cognitive neuroscience, cognitive psychology,</li> </ul>

	<p>or related field</p> <ul style="list-style-type: none"> <li>• Coding experience in R, Python, or Matlab</li> <li>• Experience in data analysis, management, preparation, and visualization</li> <li>• A definite interest of applying neuroscience knowledge to the field of consumer decision-making and marketing</li> <li>• Preferably experience analysing EEG data using techniques such as MVPA and RSA, as well as neural reliability (inter-subject correlations in neural activity)</li> </ul> <p>Master's degree: Yes</p> <p>EUR requirement: See Table Information about English requirements</p> <p>(If the faculty does not have special English requirements, general requirement from Admission Office is applied)</p>
<b>Supervisor information:</b>	<p>The project will be jointly supervised by Prof. dr. <a href="mailto:asmidts@rsm.nl">Ale Smidts</a>, (<a href="mailto:asmidts@rsm.nl">asmidts@rsm.nl</a>), Dr. <a href="mailto:mboksem@rsm.nl">Maarten Boksem</a> (<a href="mailto:mboksem@rsm.nl">mboksem@rsm.nl</a>) and Dr. <a href="mailto:genevsky@rsm.nl">Alex Genevsky</a> (<a href="mailto:genevsky@rsm.nl">genevsky@rsm.nl</a>).</p> <p><b>Recent publications</b> (see <a href="#">Erasmus Center for Neuroeconomics</a> for a full list of our work):</p> <p>Speer, S. P. H., Smidts, A., &amp; Boksem, M. A. S. (2021). Cognitive control promotes either honesty or dishonesty, depending on one's moral default. <i>Journal of Neuroscience</i>. Advance online publication. <a href="https://doi.org/10.1523/JNEUROSCI.0666-21.2021">https://doi.org/10.1523/JNEUROSCI.0666-21.2021</a></p> <p>Speer, S.P.H., Smidts A., Boksem, M.A.S. (2020). Cognitive control increases honesty in cheaters but cheating in those who are honest. <i>Proceedings of the National Academy of Sciences</i>, 117(32), 19080-19091.</p> <p>Couwenberg, L.E., Boksem, M.A.S., Sanfey, A.G., Smidts, A. (2020). Neural mechanisms of choice diversification. <i>Frontiers in Neuroscience</i>, 10.3389/fnins.2020.00502.</p> <p>Chan, H., Smidts, A., Schoots, V.C., Sanfey, A.G., Boksem, M.A.S. (2020). Decoding dynamic affective responses to naturalistic videos with shared neural patterns. <i>Neuroimage</i>, 216(8), 116618.</p> <p>Eijlers, E., Smidts, A., Boksem, M.A.S. (2020). Measuring neural arousal for advertisements and its relationship with advertising success. <i>Frontiers in Neuroscience</i>, 10.3389/fnins.2020.00736.</p> <p>Tong, L., Acikalin, Y., Genevsky, A., Shiv, B., &amp; Knutson, B. (2020).</p>

	<p>Brain activity forecasts video engagement in an internet attention market. <i>Proceedings of the National Academy of Sciences</i>, 117(12), 6936-6941.</p> <p>Speer, S.P.H., Boksem, M.A.S. (2019). Decoding fairness motivations from multivariate brain activity patterns. <i>Social Cognitive and Affective Neuroscience</i>, 14(11), 1197–1207.</p> <p>Chan, H., Smidts, A., Schoots, V.C., Dietvorst, R.C., Boksem, M.A.S. (2019). Neural similarity at temporal lobe and cerebellum predicts out-of-sample preference and recall for video stimuli. <i>Neuroimage</i>, 197, 391-401.</p> <p>Asutay, E., Genevsky, A., Barret, L.F., Hamilton, J.P., Slovic, P., &amp; Vastfjall, D. (2019). Affective calculus: The construction of affect through information integration over time. <i>Emotion</i>. <a href="https://doi.org/10.1037/emo0000681">https://doi.org/10.1037/emo0000681</a></p> <p>Kim, B., Genevsky, A., Knutson, B., &amp; Tsai, J. (2019). Culturally-valued facial expressions enhance loan request success. <i>Emotion</i>, 20(7), 1137-1153.</p> <p>Eijlers, E., Smidts, A., Boksem, M.A.S. (2019). Implicit measurement of emotional experience and its dynamics. <i>PLoS ONE</i>, 14(2), e0211496.</p> <p>Chan, H., Boksem, M.A.S., Smidts, A. (2018). Neural profiling of brands: Mapping brand image in consumers' brains with visual templates (2018) <i>Journal of Marketing Research</i>, 55(4), 600-615.</p> <p>Knutson, B., &amp; Genevsky, A. (2018). Neuroforecasting aggregate choice. <i>Current Directions in Psychological Science</i>, 27(2), 110-115.</p>
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**English requirements:** Please refer to Erasmus University China Center official website for your information [www.eur.nl/eucc](http://www.eur.nl/eucc)

Erasmus University China Center -> CSC Scholarship -> "I am a prospective CSC PhD Candidate" -> Table 1

Please note that each institute requires difference level of English, make sure to find the right institute. 2022 CSC-PhD programme information will be shared and updated soon!