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- [29] R. Buettner, B. Daxenberger, A. Eckhardt, and C. Maier, “Cognitive Workload Induced by Information Systems: Introducing an Objective Way of Measuring based on Pupillary Diameter Responses,” in *Pre-ICIS HCI/MIS 2013 Proc.*, 2013, paper 20.
- [30] B. C. Goldwater, “Psychological significance of pupillary movements,” *Psychol Bull*, vol. 77, no. 5, pp. 340–355, 1972.
- [31] H. J. t. Donkelaar, V. Němcová, M. Lammens, S. Overeem, and A. Keyser, “The autonomic nervous system,” in *Clinical Neuroanatomy: Brain Circuitry and Its Disorders*, H. J. t. Donkelaar, Ed. Springer, 2011, pp. 565–602.
- [32] S. R. Steinhauer, R. Condray, and A. Kasparek, “Cognitive modulation of midbrain function: task-induced reduction of the pupillary light reflex,” *Int J Psychophysiol*, vol. 39, no. 1, pp. 21–30, 2000.
- [33] E. H. Hess and J. M. Polt, “Pupil Size in Relation to Mental Activity during Simple Problem-Solving,” *Science*, vol. 143, no. 3611, pp. 1190–1192, 1964.
- [34] D. Kahneman and J. Beatty, “Pupil Diameter and Load on Memory,” *Science*, vol. 154, no. 3756, pp. 1583–1585, 1966.
- [35] D. Kahneman, J. Beatty, and I. Pollack, “Perceptual Deficit during a Mental Task,” *Science*, vol. 157, no. 3785, pp. 218–219, 1967.
- [36] D. Kahneman, L. Onuskaa, and R. E. Wolmana, “Effects of grouping on the pupillary response in a short-term memory task,” *Q J Exp Psychol*, vol. 20, no. 3, pp. 309–311, 1968.
- [37] J. L. Bradshaw, “Pupil Size as a Measure of Arousal during Information Processing,” *Nature*, vol. 216, no. 5114, pp. 515–516, 1967.
- [38] J. L. Bradshaw, “Pupil size and problem solving,” *Q J Exp Psychol*, vol. 20, no. 2, pp. 116–122, 1968.
- [39] H. M. Simpson, “Effects of a Task-Relevant Response on Pupil Size,” *Psychophysiology*, vol. 6, no. 2, pp. 115–121, 1969.
- [40] D. Kahneman, *Attention and Effort*. Englewood Cliffs, NJ: PH, 1973.
- [41] G. Hakarem and S. Sutton, “Pupillary Response at Visual Threshold,” *Nature*, vol. 212, no. 5061, pp. 485–486, 1966.
- [42] H. M. Simpson and F. M. Molloy, “Effects of Audience Anxiety on Pupil Size,” *Psychophysiology*, vol. 8, no. 4, pp. 491–496, 1971.
- [43] D. Kahneman and P. Wright, “Changes of pupil size and rehearsal strategies in a short-term memory task,” *Q J Exp Psychol*, vol. 23, no. 2, pp. 187–196, 1971.
- [44] R. F. Stanners and D. B. Headley, “Pupil Size and Instructional Set in Recognition and Recall,” *Psychophysiology*, vol. 9, no. 5, pp. 505–511, 1972.
- [45] J. Beatty, “Task-Evoked Pupillary Responses, Processing Load, and the Structure of Processing Resources,” *Psychol Bull*, vol. 91, no. 2, pp. 276–292, 1982.
- [46] F. Richer and J. Beatty, “Pupillary Dilations in Movement Preparation and Execution,” *Psychophysiology*, vol. 22, no. 2, pp. 204–207, 1985.
- [47] F. Richer and J. Beatty, “Contrasting Effects of Response Uncertainty on the Task-Evoked Pupillary Response and Reaction Time,” *Psychophysiology*, vol. 24, no. 3, pp. 258–262, 1987.
- [48] J. Qiyuan, F. Richer, B. L. Wagoner, and J. Beatty, “The Pupil and Stimulus Probability,” *Psychophysiology*, vol. 22, no. 5, pp. 530–534, 1985.
- [49] S. T. Iqbal, P. D. Adamczyk, X. S. Zheng, and B. P. Bailey, “Towards an Index of Opportunity: Understanding Changes in Mental Workload during Task Execution,” in *CHI '05 Proc.*, 2005, pp. 311–320.
- [50] B. P. Bailey and S. T. Iqbal, “Understanding Changes in Mental Workload during Execution of Goal-Directed Tasks and Its Application for Interruption Management,” *ACM TOCHI*, vol. 14, no. 4, pp. 21:1–21:28, 2008.
- [51] P. Ren, A. Barreto, Y. Gao, and M. Adjouadi, “Affective Assessment by Digital Processing of the Pupil Diameter,” *IEEE TAC*, vol. 4, no. 1, pp. 2–14, 2013.
- [52] A. Dimoka, “What Does the Brain Tell Us About Trust and Distrust? Evidence from a Functional Neuroimaging Study,” *MISQ*, vol. 34, no. 2, pp. 373–396, 2010.
- [53] J. vom Brocke and T.-P. Liang, “Guidelines for Neuroscience Studies in Information Systems Research,” *JMIS*, vol. 30, no. 4, pp. 211–234, 2014.
- [54] J. vom Brocke, A. Simons, B. Niehaves, K. Riemer, R. Plattfaut, and A. Cleven, “Reconstructing the Giant: On the Importance of Rigour in Documenting the Literature Search Process,” in *ECIS '09 Proc.*, 2009, pp. 2206–2217.
- [55] A. T. Duchowski, *Eye Tracking Methodology: Theory and Practice*, 2nd ed. London, UK: Springer, 2007.
- [56] A. Eckhardt, C. Maier, and R. Buettner, “The Influence of Pressure to Perform and Experience on Changing Perceptions and User Performance: A Multi-Method Experimental Analysis,” in *ICIS 2012 Proc.*, 2012.
- [57] S. P. Verney, E. Granholm, and D. P. Dionisio, “Pupillary responses and processing resources on the visual backward masking task,” *Psychophysiology*, vol. 38, no. 1, pp. 76–83, 2001.
- [58] L. Breiman, “Random Forests,” *Machine Learning*, vol. 45, no. 1, pp. 5–32, 2001.
- [59] K. Kačar, M. A. Rocca, M. Copetti, S. Sala, v. Mesaroš, T. Stosić Opinčal, D. Caputo, M. Absinta, J. Drulović, V. S. Kostić, G. Comi, and M. Filippi, “Overcoming the ClinicalMR Imaging Paradox of Multiple Sclerosis: MR Imaging Data Assessed with a Random Forest Approach,” *AJNR*, vol. 32, no. 11, pp. 2098–2102, 2011.
- [60] R. Díaz-Uriarte and S. A. de Andrés, “Gene selection and classification of microarray data using random forest,” *BMC Bioinformatics*, vol. 7, no. 3, 2006.
- [61] J. Zhang, I. Sokal, E. R. Peskind, J. F. Quinn, J. Jankovic, C. Kenney, K. A. Chung, S. P. Millard, J. G. Nutt, and T. J. Montine, “CSF Multianalyte Profile Distinguishes Alzheimer and Parkinson Diseases,” *AJCP*, vol. 129, no. 4, pp. 526–529, 2008.
- [62] J. Ali, R. Khan, N. Ahmad, and I. Maqsood, “Random Forests and Decision Trees,” *IJCSI*, vol. 9, no. 5, pp. 272–278, 2012.
- [63] R Core Team, *R: A Language and Environment for Statistical Computing*, R Foundation for Statistical Computing, Vienna, Austria, 2014.
- [64] A. Liaw and M. Wiener, “Classification and Regression by randomForest,” *R News*, vol. 2, no. 3, pp. 18–22, 2002.