

# PSYC0021: Affective Interaction

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Abdelrahman, Y., Velloso, E., Dingler, T., Schmidt, A., & Vetere, F. (2017). Cognitive Heat. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*, 1(3), 1–20. <https://doi.org/10.1145/3130898>

Andrew Ortony, Donald A. Norman, & William Revelle. (2005). Affect and Proto-Affect in Effective Functioning. In J.-M. Fellous & M. A. Arbib (Eds.), *Who Needs Emotions?* (pp. 173–202). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195166194.003.0007>

Aviezer, H., Trope, Y., & Todorov, A. (2012). Body Cues, Not Facial Expressions, Discriminate Between Intense Positive and Negative Emotions. *Science*, 338(6111), 1225–1229. <https://doi.org/10.1126/science.1224313>

Beale, R., & Creed, C. (2009). Affective interaction: How emotional agents affect users. *International Journal of Human-Computer Studies*, 67(9), 755–776. <https://doi.org/10.1016/j.ijhcs.2009.05.001>

Bickmore, T. W., Fernando, R., Ring, L., & Schulman, D. (2010). Empathic Touch by Relational Agents. *IEEE Transactions on Affective Computing*, 1(1), 60–71. <https://doi.org/10.1109/T-AFFC.2010.4>

Bitbol, M., & Petitmengin, C. (2013). A Defense of Introspection from Within. 8(3), 269–279. <http://constructivist.info/8/3/269.bitbol>

Boehner, K., DePaula, R., Dourish, P., & Sengers, P. (2007). How emotion is made and measured. *International Journal of Human-Computer Studies*, 65(4), 275–291. <https://doi.org/10.1016/j.ijhcs.2006.11.016>

Calvo, R. A., & Peters, D. (2014). *Positive computing: technology for wellbeing and human potential*. MIT Press. <https://ieeexplore.ieee.org/book/6981846>

Cerekovic, A., Aran, O., & Gatica-Perez, D. (2017). Rapport with Virtual Agents: What Do Human Social Cues and Personality Explain? *IEEE Transactions on Affective Computing*, 8(3), 382–395. <https://doi.org/10.1109/T-AFFC.2016.2545650>

Chandler, J., & Schwarz, N. (2009). How extending your middle finger affects your perception of others: Learned movements influence concept accessibility. *Journal of Experimental Social Psychology*, 45(1), 123–128. <https://doi.org/10.1016/j.jesp.2008.06.012>

Clore, G. L., & Palmer, J. (2009). Affective guidance of intelligent agents: How emotion

controls cognition. *Cognitive Systems Research*, 10(1), 21–30.  
<https://doi.org/10.1016/j.cogsys.2008.03.002>

Clore, G. L., Schiller, A. J., & Shaked, A. (2018a). Affect and cognition: three principles. *Current Opinion in Behavioral Sciences*, 19, 78–82.  
<https://doi.org/10.1016/j.cobeha.2017.11.010>

Clore, G. L., Schiller, A. J., & Shaked, A. (2018b). Affect and cognition: three principles. *Current Opinion in Behavioral Sciences*, 19, 78–82.  
<https://doi.org/10.1016/j.cobeha.2017.11.010>

Coeckelbergh, M. (2012). Are Emotional Robots Deceptive? *IEEE Transactions on Affective Computing*, 3(4), 388–393. <https://doi.org/10.1109/T-AFFC.2011.29>

Critchley, H. D., & Garfinkel, S. N. (2018). The influence of physiological signals on cognition. *Current Opinion in Behavioral Sciences*, 19, 13–18.  
<https://doi.org/10.1016/j.cobeha.2017.08.014>

D' Mello, S. K. (2016). On the Influence of an Iterative Affect Annotation Approach on Inter-Observer and Self-Observer Reliability. *IEEE Transactions on Affective Computing*, 7 (2), 136–149. <https://doi.org/10.1109/TAFFC.2015.2457413>

DMello, S. K., Dowell, N., & Graesser, A. (2013). Unimodal and Multimodal Human Perception of Naturalistic Non-Basic Affective States during Human-Computer Interactions. *IEEE Transactions on Affective Computing*, 4(4), 452–465.  
<https://doi.org/10.1109/T-AFFC.2013.19>

Ekman, P. (2016). What Scientists Who Study Emotion Agree About. *Perspectives on Psychological Science*, 11(1), 31–34. <https://doi.org/10.1177/1745691615596992>

Elkharraz, G., Thumfart, S., Akay, D., Eitzinger, C., & Henson, B. (2014). Making Tactile Textures with Predefined Affective Properties. *IEEE Transactions on Affective Computing*, 5 (1), 57–70. <https://doi.org/10.1109/T-AFFC.2013.21>

Fanselow, M. S. (2018). Emotion, motivation and function. *Current Opinion in Behavioral Sciences*, 19, 105–109. <https://doi.org/10.1016/j.cobeha.2017.12.013>

Forgas, J. P. (2017). Mood Effects on Cognition: Affective Influences on the Content and Process of Information Processing and Behavior. In *Emotions and Affect in Human Factors and Human-Computer Interaction* (pp. 89–122). Elsevier.  
<https://doi.org/10.1016/B978-0-12-801851-4.00003-3>

Gallace, A., & Spence, C. (2010). The science of interpersonal touch: An overview. *Neuroscience & Biobehavioral Reviews*, 34(2), 246–259.  
<https://doi.org/10.1016/j.neubiorev.2008.10.004>

Gao, Y., Bianchi-Berthouze, N., & Meng, H. (2012). What Does Touch Tell Us about Emotions in Touchscreen-Based Gameplay? *ACM Transactions on Computer-Human Interaction*, 19(4), 1–30. <https://doi.org/10.1145/2395131.2395138>

Gratch, J., & Marsella, S. (2004). A domain-independent framework for modeling emotion. *Cognitive Systems Research*, 5(4), 269–306. <https://doi.org/10.1016/j.cogsys.2004.02.002>

- Gruebler, A., & Suzuki, K. (2014). Design of a Wearable Device for Reading Positive Expressions from Facial EMG Signals. *IEEE Transactions on Affective Computing*, 5(3), 227–237. <https://doi.org/10.1109/TAFFC.2014.2313557>
- Hamacher, A., Bianchi-Berthouze, N., Pipe, A. G., & Eder, K. (2016). Believing in BERT: Using expressive communication to enhance trust and counteract operational error in physical Human-robot interaction. 2016 25th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), 493–500. <https://doi.org/10.1109/ROMAN.2016.7745163>
- Harmon-Jones, C., Bastian, B., & Harmon-Jones, E. (2016). The Discrete Emotions Questionnaire: A New Tool for Measuring State Self-Reported Emotions. *PLOS ONE*, 11(8). <https://doi.org/10.1371/journal.pone.0159915>
- Hertenstein, M. J., Holmes, R., McCullough, M., & Keltner, D. (2009). The communication of emotion via touch. *Emotion*, 9(4), 566–573. <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&AN=00130470-200908000-00017&LSLINK=80&D=ovft>
- Hirano, T., Shiomi, M., Iio, T., Kimoto, M., Tanev, I., Shimohara, K., & Hagita, N. (2018). How Do Communication Cues Change Impressions of Human–Robot Touch Interaction? *International Journal of Social Robotics*, 10(1), 21–31. <https://doi.org/10.1007/s12369-017-0425-8>
- Hudlicka, E. (2003). To feel or not to feel: The role of affect in human–computer interaction. *International Journal of Human-Computer Studies*, 59(1–2), 1–32. [https://doi.org/10.1016/S1071-5819\(03\)00047-8](https://doi.org/10.1016/S1071-5819(03)00047-8)
- Hudlicka, E. (2017). Computational Modeling of Cognition–Emotion Interactions: Theoretical and Practical Relevance for Behavioral Healthcare. In *Emotions and Affect in Human Factors and Human-Computer Interaction* (pp. 383–436). Elsevier. <https://doi.org/10.1016/B978-0-12-801851-4.00016-1>
- Huisman, G., Darriba Frederiks, A., Van Dijk, B., Hevlen, D., & Krose, B. (2013). The TaSSt: Tactile sleeve for social touch. 2013 World Haptics Conference (WHC), 211–216. <https://doi.org/10.1109/WHC.2013.6548410>
- Hutson, S., Lim, S. L., Bentley, P. J., Bianchi-Berthouze, N., & Bowling, A. (2011). Investigating the Suitability of Social Robots for the Wellbeing of the Elderly. In S. D’Mello, A. Graesser, B. Schuller, & J.-C. Martin (Eds.), *Affective Computing and Intelligent Interaction* (Vol. 6974, pp. 578–587). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-24600-5\\_61](https://doi.org/10.1007/978-3-642-24600-5_61)
- Isbister, K., Höök, K., Laaksolahti, J., & Sharp, M. (2007). The sensual evaluation instrument: Developing a trans-cultural self-report measure of affect. *International Journal of Human-Computer Studies*, 65(4), 315–328. <https://doi.org/10.1016/j.ijhcs.2006.11.017>
- Janssen, J. H., Bailenson, J. N., IJsselsteijn, W. A., & Westerink, J. H. D. M. (2010). Intimate Heartbeats: Opportunities for Affective Communication Technology. *IEEE Transactions on Affective Computing*, 1(2), 72–80. <https://doi.org/10.1109/T-AFFC.2010.13>

- Jeon, M. (2017). Emotions in Driving. In *Emotions and Affect in Human Factors and Human-Computer Interaction* (pp. 437–474). Elsevier.  
<https://doi.org/10.1016/B978-0-12-801851-4.00017-3>
- Jordan, P. W. (1998). Human factors for pleasure in product use. *Applied Ergonomics*, 29(1), 25–33. [https://doi.org/10.1016/S0003-6870\(97\)00022-7](https://doi.org/10.1016/S0003-6870(97)00022-7)
- Jordan, P. W. (2000). *Designing pleasurable products: an introduction to the new human factors*. Taylor & Francis.
- Kamide, H., & Arai, T. (2017). Perceived Comfortableness of Anthropomorphized Robots in U.S. and Japan. *International Journal of Social Robotics*, 9(4), 537–543.  
<https://doi.org/10.1007/s12369-017-0409-8>
- Kleinsmith, A., & Bianchi-Berthouze, N. (2013). Affective Body Expression Perception and Recognition: A Survey. *IEEE Transactions on Affective Computing*, 4(1), 15–33.  
<https://doi.org/10.1109/T-AFFC.2012.16>
- Kroupi, E., Vesin, J.-M., & Ebrahimi, T. (2016). Subject-Independent Odor Pleasantness Classification Using Brain and Peripheral Signals. *IEEE Transactions on Affective Computing*, 7(4), 422–434. <https://doi.org/10.1109/TAFFC.2015.2496310>
- Kusserow, M., Amft, O., & Troster, G. (2013). Modeling arousal phases in daily living using wearable sensors. *IEEE Transactions on Affective Computing*, 4(1), 93–105.  
<https://doi.org/10.1109/T-AFFC.2012.37>
- Küster, D., & Kappas, A. (2017). Measuring Emotions Online: Expression and Physiology. In J. A. Holyst (Ed.), *Cyberemotions* (pp. 71–93). Springer International Publishing.  
[https://doi.org/10.1007/978-3-319-43639-5\\_5](https://doi.org/10.1007/978-3-319-43639-5_5)
- Liu, K., Tolins, J., Fox Tree, J. E., Neff, M., & Walker, M. A. (2016). Two Techniques for Assessing Virtual Agent Personality. *IEEE Transactions on Affective Computing*, 7(1), 94–105. <https://doi.org/10.1109/TAFFC.2015.2435780>
- Marc, Hassenzahl, Andrew Monk. (2010). The Inference of Perceived Usability From Beauty. *Human-Computer Interaction*, 25(3), 235–260.  
<http://www.tandfonline.com/doi/abs/10.1080/07370024.2010.500139>
- Marsella, S. C., & Gratch, J. (2009). EMA: A process model of appraisal dynamics. *Cognitive Systems Research*, 10(1), 70–90. <https://doi.org/10.1016/j.cogsys.2008.03.005>
- Mauss, I. B., & Robinson, M. D. (2009). Measures of emotion: A review. *Cognition & Emotion*, 23(2), 209–237. <https://doi.org/10.1080/02699930802204677>
- McCarthy, J., J., & Wright, P. (n.d.). *Technology as Experience*.  
<https://ieeexplore.ieee.org/book/6267305>
- Nardelli, M., Valenza, G., Greco, A., Lanata, A., & Scilingo, E. P. (2015). Recognizing Emotions Induced by Affective Sounds through Heart Rate Variability. *IEEE Transactions on Affective Computing*, 6(4), 385–394. <https://doi.org/10.1109/TAFFC.2015.2432810>
- Norman, D. (2004). Introduction to This Special Section on Beauty, Goodness, and

- Usability. *Human-Computer Interaction*, 19(4), 311–318.  
[https://doi.org/10.1207/s15327051hci1904\\_1](https://doi.org/10.1207/s15327051hci1904_1)
- Obrist, M., Seah, S. A., & Subramanian, S. (2013). Talking about tactile experiences. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems - CHI '13*, 1659–1668. <https://doi.org/10.1145/2470654.2466220>
- Pessoa, L. (n.d.). Do Intelligent Robots Need Emotion? *Trends in Cognitive Sciences*, 21 (11), 817–819. <https://doi.org/10.1016/j.tics.2017.06.010>
- Petitmengin, C. (2006). Describing one's subjective experience in the second person: An interview method for the science of consciousness. *Phenomenology and the Cognitive Sciences*, 5(3–4), 229–269. <https://doi.org/10.1007/s11097-006-9022-2>
- Petitmengin, C., & Lachaux, J.-P. (27 C.E.). Microcognitive science: bridging experiential and neuronal microdynamics. *Frontiers in Human Neuroscience*, 7. <https://doi.org/10.3389/fnhum.2013.00617>
- Petrecu, B., Baurley, S., & Bianchi-Berthouze, N. (2015). How do designers feel textiles? *2015 International Conference on Affective Computing and Intelligent Interaction (ACII)*, 982–987. <https://doi.org/10.1109/ACII.2015.7344695>
- Politou, E., Alepis, E., & Patsakis, C. (2017). A survey on mobile affective computing. *Computer Science Review*, 25, 79–100. <https://doi.org/10.1016/j.cosrev.2017.07.002>
- Poppa, T., & Bechara, A. (2018). The somatic marker hypothesis: revisiting the role of the 'body-loop' in decision-making. *Current Opinion in Behavioral Sciences*, 19, 61–66. <https://doi.org/10.1016/j.cobeha.2017.10.007>
- Rosenthal-von der Pütten, A. M., & Krämer, N. C. (2015). Individuals' Evaluations of and Attitudes Towards Potentially Uncanny Robots. *International Journal of Social Robotics*, 7 (5), 799–824. <https://doi.org/10.1007/s12369-015-0321-z>
- Roy, R., Goatman, M., & Khangura, K. (2009). User-centric design and Kansei Engineering. *CIRP Journal of Manufacturing Science and Technology*, 1(3), 172–178. <https://doi.org/10.1016/j.cirpj.2008.10.007>
- Russell, J. A., & Barrett, L. F. (1999). Core affect, prototypical emotional episodes, and other things called emotion: Dissecting the elephant. *Journal of Personality and Social Psychology*, 76(5), 805–819. <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&AN=00005205-199905000-00009&LSLINK=80&D=ovft>
- Sauter, D. A. (2017). The Nonverbal Communication of Positive Emotions: An Emotion Family Approach. *Emotion Review*, 9(3), 222–234. <https://doi.org/10.1177/1754073916667236>
- Sefidgar, Y. S., MacLean, K. E., Yohanan, S., Van der Loos, H. F. M., Croft, E. A., & Garland, E. J. (2016). Design and Evaluation of a Touch-Centered Calming Interaction with a Social Robot. *IEEE Transactions on Affective Computing*, 7(2), 108–121. <https://doi.org/10.1109/TAFFC.2015.2457893>

Segalin, C., Perina, A., Cristani, M., & Vinciarelli, A. (2017a). The Pictures We Like Are Our Image: Continuous Mapping of Favorite Pictures into Self-Assessed and Attributed Personality Traits. *IEEE Transactions on Affective Computing*, 8(2), 268–285. <https://doi.org/10.1109/TAFFC.2016.2516994>

Segalin, C., Perina, A., Cristani, M., & Vinciarelli, A. (2017b). The Pictures We Like Are Our Image: Continuous Mapping of Favorite Pictures into Self-Assessed and Attributed Personality Traits. *IEEE Transactions on Affective Computing*, 8(2), 268–285. <https://doi.org/10.1109/TAFFC.2016.2516994>

Spadafora, M., Chahuneau, V., Martelaro, N., Sirkin, D., & Ju, W. (2016). Designing the Behavior of Interactive Objects. *Proceedings of the TEI '16: Tenth International Conference on Tangible, Embedded, and Embodied Interaction - TEI '16*, 70–77. <https://doi.org/10.1145/2839462.2839502>

Stanton, C. J., & Stevens, C. J. (2017). Don't Stare at Me: The Impact of a Humanoid Robot's Gaze upon Trust During a Cooperative Human–Robot Visual Task. *International Journal of Social Robotics*, 9(5), 745–753. <https://doi.org/10.1007/s12369-017-0422-y>

Tajadura-Jiménez, A., Basia, M., Deroy, O., Fairhurst, M., Marquardt, N., & Bianchi-Berthouze, N. (2015). As Light as your Footsteps. *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems - CHI '15*, 2943–2952. <https://doi.org/10.1145/2702123.2702374>

Tractinsky, N., Katz, A. S., & Ikar, D. (2000). What is beautiful is usable. *Interacting with Computers*, 13(2), 127–145. [https://doi.org/10.1016/S0953-5438\(00\)00031-X](https://doi.org/10.1016/S0953-5438(00)00031-X)

Tuch, A., Kreibig, S., Roth, S., Bargas-Avila, J., Opwis, K., & Wilhelm, F. (2011). The Role of Visual Complexity in Affective Reactions to Webpages: Subjective, Eye Movement, and Cardiovascular Responses. *IEEE Transactions on Affective Computing*, 2(4), 230–236. <https://doi.org/10.1109/T-AFFC.2011.18>

Turchet, L., & Bresin, R. (2015). Effects of Interactive Sonification on Emotionally Expressive Walking Styles. *IEEE Transactions on Affective Computing*, 6(2), 152–164. <https://doi.org/10.1109/TAFFC.2015.2416724>

van der Zwaag, M. D., Janssen, J. H., & Westerink, J. H. D. M. (n.d.). Directing Physiology and Mood through Music: Validation of an Affective Music Player. *IEEE Transactions on Affective Computing*, 4(1), 57–68. <https://doi.org/10.1109/T-AFFC.2012.28>

Vinciarelli, A., & Mohammadi, G. (2014). A Survey of Personality Computing. *IEEE Transactions on Affective Computing*, 5(3), 273–291. <https://doi.org/10.1109/TAFFC.2014.2330816>

Vinciarelli, A., Pantic, M., Heylen, D., Pelachaud, C., Poggi, I., D'Errico, F., & Schroeder, M. (2012). Bridging the Gap between Social Animal and Unsocial Machine: A Survey of Social Signal Processing. *IEEE Transactions on Affective Computing*, 3(1), 69–87. <https://doi.org/10.1109/T-AFFC.2011.27>

Wac, K., & Tsiourti, C. (2014). Ambulatory Assessment of Affect: Survey of Sensor Systems for Monitoring of Autonomic Nervous Systems Activation in Emotion. *IEEE Transactions on Affective Computing*, 5(3), 251–272. <https://doi.org/10.1109/TAFFC.2014.2332157>