# Damien Dupré, Ph.D.

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#### IN A NUTSHELL

34, French but obviously fluent in English, passionate about data, statistics and emotional reactions, moving to Dublin to follow his beloved girlfriend and looking for an academic position to continue my research activities.

## **RESEARCH FOCI**

Emotion, User Experience, Facial Expression, Wearable Devices, Physiology, Human Computer Interactions

# Now

<ul> <li>Industrial Postdoc – SensumCo Ltd. / Queen's University Belfast, UK</li> </ul>	June 2016 – June 2018
<b>EDUCATION</b> ■ Industrial Ph.D. – IXIADE / University Grenoble Alps, France	2016
"Influence of product innovativeness on users' emotions: a multicomponential approach"  M.Sc. Neurocognition & Social Cognition, Univ. Grenoble Alpes, France	2010
■ B.Sc. Psychology, Univ. Grenoble Alpes, France	2007
<ul> <li>Scientific A Level</li> </ul>	2003
TEACHING EXPERIENCE	
<ul> <li>Introduction to R for data science – Post-graduates (14h per year)</li> </ul>	2016
<ul> <li>Social cognition and emotions – Master Psychology (18h per year)</li> </ul>	2016
<ul> <li>Data science for working psychology – M1 Psychology (9h per year)</li> </ul>	2015
<ul> <li>Social psychology – Master Marketing (24h per year)</li> </ul>	2014 – 2015
<ul> <li>Introduction to working psychology – L2 Psychology (12h per year)</li> </ul>	2014 – 2015
<ul> <li>Introduction to psychology – L1 Psychology (24h per year)</li> </ul>	2011 – 2015
RESEARCH PROJECTS & PROFESSIONAL EXPERIENCES	
<ul> <li>Visiting Research Fellow, Queen's University of Belfast, United Kingdom         Empathy skills assessment with facial expression recognition     </li> </ul>	2016
<ul> <li>UX Researcher, IXIADE company, Grenoble</li> <li>Evaluation of users' acceptance with innovative services and products</li> </ul>	2011
<ul> <li>Research Assistant, Laboratory of Educational Sciences, Grenoble</li> <li>Validation and analyses of an e-learning software</li> </ul>	2010 – 2011
<ul> <li>Research Assistant, Interuniversity Laboratory for Psychology, Grenoble Creation of a dynamic and spontaneous facial expressions database</li> </ul>	2009 – 2013

# **DATA SCIENCE SKILLS** (R language high expertise)

- Data wrangling Tidyverse, dplyr, dbplyr, purrr, tibble
- Database Core Tools For HTTP Requests, RMySQL, Rpostgres, Parsing Structured Web Data
- Statistics Linear/non-linear Regression, Mixed models, Bayesian Inference
- Time-series Forecasting, Decomposition, Dynamic Regression, Multivariate Time Series Model,
- Machine Learning kMeans, Random Forests, SVM
- Visualisation 2D/3D, Geo-spatial charting, Econometrics, network, heatmap
- Web App Web and Server Frameworks (Shiny), Cloud Computing and Storage,

#### Publications in Academic Journals

- **Dupré, D.,** Andelic, N., Zajac, A., Morrison, G., & McKeown, G. (Submitted). The effect of personality and social context on willingness to share emotion information on social media. *PsyArXiv Preprints*. [DOI: 10.17605/OSF.IO/G8NDZ]
- **Dupré, D.,** Dubois, M., & Tcherkassof, A. (2017). Role of emotions in product acceptance: Evaluation of the cognitive, motivational and subjective component. *Psychologie du Travail et des Organisations*. [DOI: 10.1016/j.pto.2017.07.001]
- **Dupré, D.**, Akpan, D., Elias, E., Adam, J-M., Meillon, B., Bonnefond, N., Dubois, M. & Tcherkassof, A. (2015). A configurable and usable annotation tool for the study of emotional stimuli. *International Journal of Human-Computer Studies*, 83, 51-61. [DOI: 10.1016/j.ijhcs.2015.05.010]
- **Dupré, D.,** Dubois, M., Tcherkassof, A. & Pizelle, P. (2015). Cadres et méthodes d'analyse des émotions suscitées par des produits innovants. *InnovatiO*, 3. [URL: http://innovacs-innovatio.upmf-grenoble.fr/index.php?id=272]
- Tcherkassof, A., **Dupré, D.**, Meillon, B., Mandran, N., Dubois, M. & Adam, J.-M. (2013). DynEmo: A video database of natural facial expressions of emotions. *The International Journal of Multimedia & Its Applications*, *5*(5), 61-80. [DOI: 10.5121/ijma.2013.5505]
- Dubois, M., **Dupré, D.,** Adam, J.-M., Tcherkassof, A., Mandran, N., & Meillon, B. (2013). The influence of facial designs interfaces on dynamic emotional recognition. *Journal of Multimodal User Interfaces, 7*(1-2), 111-119. [DOI: 10.1007/s12193-012-0103-y]
- **Dupré, D.,** Loiseau, M., Salem, H., Dessus, P. & Simonian, S. (2012). Quelques critères d'utilisation d'un outil d'évaluation automatique de synthèses de cours à distance. *Recherche & Education, les non-usages des TIC, 6,* 143-159. [URL: http://rechercheseducations.revues.org/1231]
- Dessus, P., Trausan-Matu, S., Wild, F., **Dupré, D.,** Loiseau, M., Rebedea, T., & Zampa, V. (2011). Un environnement personnel d'apprentissage évaluant des distances épistémiques et dialogiques. *Distances & Savoirs*, *9*(4), 473–492. [DOI: 10.3166/DS.9.473-492]

#### Publications in Conferences Proceedings

- **Dupré, D.,** Andelic, N., Morrison, G., & McKeown, G. (2018). Multivariate Body Area Network of Physiological Measures "In the Wild": A case study with zipline activity. *International Conference on Methods and Techniques in Behavioral Research.* Manchester, UK, June 6-8.
- **Dupré, D.,** Andelic, N., Morrison, G., & McKeown, G. (2018). Accuracy of three commercial automatic emotion recognition systems across different individuals and their facial expressions. *IEEE International Conference on Pervasive Computing and Communications Workshop: EmotionAware'18.* Athens, Greece, March 19-23.
- McKeown, G., Spencer, C., Patterson, A., Creaney, T., & **Dupré**, **D.** (2017) Comparing Virtual Reality with Computer Monitors as Rating Environments for Affective Dimensions in Social Interactions. *Proceedings of the 7<sup>th</sup> International Conference on Affective Computing and Intelligent Interaction*. San Antonio, United States, October 23-26. [ISBN: 978-1-5386-0562-2]
- **Dupré, D.,** Bland, B., Bolster, A., Morrison, G., & McKeown, G. (2017). Dynamic Model of Athletes' Emotions Based on Wearable Devices. *Proceedings of the International Conference on Applied Human Factors and Ergonomics* (pp. 42-50). Los Angeles, United States, July 17-21. [DOI: 10.1007/978-3-319-60822-8\_4]
- **Dupré, D.,** Booth, A., Bolster, A., Morrison, G., & McKeown, G. (2017). Dynamic Analysis of Automatic Emotion Recognition Using Generalized Additive Mixed Models. *Proceedings of the convention of the Society for the Study of Artificial Intelligence and Simulation for Behaviour* (pp. 158-163). Bath, United Kingdom, April 18-22. [URL: http://aisb2017.cs.bath.ac.uk/proceedings.html]
- **Dupré, D.,** Tcherkassof, A., Dubois, M. & Pizelle, P. (2016). Etude de l'expérience utilisateur émotionnelle: Quels sont les impacts des émotions suscitées des produits innovants sur les perceptions des utilisateurs. In C. Lemoine, V. Majer, P. Salengros & A. Di Fabio (Eds.), *Effets des modes d'organisation au travail* (pp. 19-30). Paris: L'Harmattan. [ISBN: 978-2-343-07411-5]
- **Dupré, D.,** Tcherkassof, A. & Dubois, M. (2015). Emotions triggered by innovative products, A multicomponential approach of emotions for User eXperience tools. In R. Cowie, Q. Ji & J. Tao (Eds.), *Proceedings of the 6<sup>th</sup> International Conference on Affective Computing and Intelligent Interaction Congress* (pp. 772-777). Xi'an, China, September 21-24. [DOI: 10.1109/ACII.2015.7344657]
- Alex, P. & **Dupré**, **D.** (2014). SOURCE, a Case Study for the Design of Precious Moments' Memory. In J. Redström, E. Stolterman, A. Valtonen, C. DiSalvo, J. Hunt, Y.-K. Lim & K. Niedderer (Eds.), *Proceedings of the Conference of the Design Research Society* (pp. 782-790). Umeå, Sweden, June 16-19. [ISBN: 978-91-7601-068-6]
- Dupré, D., Tcherkassof, A., Dubois, M. & Pizelle, P. (2012). Measuring emotional states and behavioral responses to innovative products. In Brasset, J., Hekkert, P., Ludden, G., Malspass, M., & McDonnell, J. (Eds.),

- *Proceedings of 8<sup>th</sup> International Conference on Design and Emotion: Out of Control* (pp. 1-8). London, United-Kingdom, September 11-14. [URL: http://www.arts.ac.uk/csm/de2012]
- Loiseau, M., **Dupré, D.** & Dessus, P. (2011). *Pensum*, un système d'aide à la compréhension de cours à distance. In M. Bétrancourt, C. Depover, V. Luengo, B. De Lièvre & G. Temperman (Eds.), *EIAH'2011: A la recherche des convergences entre les acteurs des EIAH* (pp. 287–299). Mons, Belgium, May 25-27. [ISBN: 978-2-87325-061-4] best interdisciplinary communication award
- **Dupré, D.,** Dubois, M., Mandran, N., Tcherkassof, A., Meillon, B. & Adam, J.-M. (2010). Interface faciale émotionnelle: Les effets des différentes modalités de presentation. In G. Calvary & M. Wolff (Eds.), *Proceedings of the Ergonomie et Informatique Avancee Conference* (pp. 37-43). Biarritz, France, October 13-15. [DOI: 10.1145/1868650.1868657]
- Meillon, B., Tcherkassof, A., Mandran, N., Adam, J.-M., Dubois, M., **Dupré, D.,** Benoît, A.-M., Guérin-Dugué, A. & Caplier, A. (2010). DynEmo: A Corpus of dynamic and spontaneous emotional facial expressions. In M. Kipp, J.-C. Martin, P. Paggio & D. Heylen (Eds.), *Proceedings of the International Workshop Series on Multimodal Corpora, Tools and Resources: Advances in Capturing, Coding and Analyzing Multimodality* (pp. 31-36). La Valette, Malta, May 17-23.

## **COMMUNICATIONS IN CONFERENCES**

- **Dupré, D.,** Morrison, G., & McKeown, G. (2017). *Physiological correlates of Emotions "In The Wild": A case study with mountain bikers.* International Society for Research on Emotion, St. Louis, United States, July 26-29.
- **Dupré, D.,** Tcherkassof, A. & Dubois, M. (2014). *Introduction a l'expérience utilisateur émotionnelle : Quels sont les impacts des émotions suscitées des produits innovants sur les perceptions et les réactions des utilisateurs ?* Colloque TechnUse, de l'acceptabilité à l'usage des technologies innovantes, Grenoble, France, October 22-23.
- **Dupré, D.,** Meillon, B. & Tcherkassof, A. (2014). *Oudjat: A configurable and usable annotation tool for the study of facial expression*. World Congress on Facial Expression of Emotion, Porto, Portugal, October 11-13.
- Tcherkassof, A. & **Dupré**, **D.** (2014). *Spontaneous and dynamic emotional facial expressions reflect action readiness*. World Congress on Facial Expression of Emotion, Porto, Portugal, October 11-13.
- **Dupré, D.,** Pizelle, P., Dubois, M. & Tcherkassof, A. (2014). *Are approach-avoidance relevant cues of the Emotional User eXperience? Case studies with innovative products.* Consortium of European Research on Emotion, Berlin, Germany, March 26-28.
- **Dupré, D.,** Pizelle, P., Dubois, M. & Tcherkassof, A. (2013). *Mesurer de l'expérience utilisateur émotionnelle de produits innovants: Quels paradigmes et outils?* Les Doctorales de l'Innovation, Grenoble, France, December 5-6.
- **Dupré, D.** & Tcherkassof, A. (2010). *On-line recognition of dynamic and spontaneous facial expression.*Consortium of European Research on Emotion, Villeneuve d'Ascq, France, April 22-24.

#### **POSTERS**

- Spencer, C., McKeown, G. & **Dupré, D.** (2017). *Empathy and Social Status: The Interplay between Perceptions of Empathy Expression and Social Status*. International Convention of Psychological Science, Vienna, Austria, March 23-25
- **Dupré, D.,** McKeown, G. & Tcherkassof, A. (2016). *Does "reading the mind in the eyes" mean "reading the emotion in the face"? A study of Mind-Reading Ability measures*. Workshop Animal and Human Emotions, Erice, Italy, May 16-20.
- **Dupré, D.,** & Tcherkassof, A. (2015). *Recognition of action readiness in natural facial expression*. International Society for Research on Emotion, Geneva, Switzerland, July 8-10.
- **Dupré, D.,** & Tcherkassof, A. (2015). *Manual annotation of facial expressions for experiments*. European Conference on Facial Expression, Measure, and Meaning, Geneva, Switzerland, July 6-7.
- **Dupré, D.,** Tcherkassof, A., Meillon, B., Mandran, N., Adam, J.-M., Dubois, M., Guérin-Dugué, A., Benoit, A.-M. & Caplier, A. (2013). *Induction et annotation d'expressions faciales spontanées et dynamiques : La base de données DynEmo*. Congrès de la Société Française de Psychologie, Lyon, France, September 11-13.
- **Dupré, D.,** & Tcherkassof, A. (2012). "D'you know what I mean?" Free recognition of dynamic and spontaneous facial expressions. Consortium of European Research on Emotion, Canterbury, United Kingdom, May 2-5.
- Tcherkassof, A., **Dupré, D.**, Dubois, M., Meillon, B., Mandran, N. & Adam, J.-M. (2009). *DynEmo: A database of dynamic and spontaneous emotional facial expressions*. International Society for Research on Emotion, Leuven, Belgium, August 6-8.

#### OTHER SCIENTIFIC PRODUCTIONS

**Dupré, D.,** Bolster, A., Morrison, G., & McKeown, G. (Submitted). Methods for combining and analysing human signals to estimate affective states context related. Patent Pending.

Gillian, A., Stoyanov, S., Hesgens, J., Smithies, A., Braidman, I., Mauerhofer, C., Osenova, P., Simov, K., Berlanga, A., Bruggen, J-V., Greller, W., Rebedea, T., Posea, V., Trausan-Matu, S., **Dupré, D.,** Salem, H., Dessus, P., Loiseau, M., Westerhout, E., Monachesi, P., Koblischke, R., Hoisl, B., Haley D. & Wild, F. (2011). Validation 4. Project Deliverable D7.4., LTfLL -2008-212578.

#### **FUNDINGS & GRANT**

- Innovate UK (2016) knowledge transfer partnership between Sensum Co Ltd. and Queen's University Belfast – post-doctoral fellowship (£50,000)
- Pole Grenoble Cognition (2014) development of EmoLyse a software for emotion evaluations (€3,000)
- Pole Grenoble Cognition (2013) development of Oudjat a software for emotion annotations (€3,000)
- University of Grenoble (2012) diffusion and valorisation of the DynEmo database (€4,000)
- French National Agency for Research and Technologies (2011) doctoral fellowship (€78,840)

#### **ACADEMIC RESPONSIBILITIES**

- Elected member of the Academic Council Univ. of Grenoble Alpes (2012 2014)
- Elected delegate of Ph.D. students Interuniversity Laboratory of Psychology (2013 2015)

#### **SCIENTIFIC NETWORKS**

- Member of the International Society for Research on Emotion (ISRE) Since 2012
- Member of the Association for the Advancement of Affective Computing (AAAC) Since 2015
- Reviewer IEEE Transaction on Affective Computing, Language Resources and Evaluation,
   Intelligent Virtual Agents conference (2016 and 2017) and International Conference on Affective
   Computing and Intelligent Interaction (2017)

# STUDENT SUPERVISION (co-supervised by <sup>1</sup>Michel Dubois, <sup>2</sup>Anna Tcherkassof, <sup>3</sup>Anne Guérin)

- Alaa Daghash<sup>1</sup> (Master Management, Technology & Innovation) 2011-2012
   Emotions and their influence on innovative product perception.
- Charlène Lamure<sup>2</sup> (Master Psychology) 2012-2013
   When anger triggers aggressive behaviours: The emotional component of crimes.
- Thomas Ballestica<sup>2,3</sup> (Master Psychology) 2012-2014 EEG signal in dynamic and spontaneous facial expressions recognition.
- Kelly Luiset & Selma Bourenane <sup>2</sup> (Master Psychology) 2013-2014
   Recognition of natural facial expressions by French and Algerian people.
- Jérémy Josserand<sup>2</sup> (Master Psychology) 2013-2014
   Action readiness recognition of facial expressions.
- Hafiza Meddah<sup>2</sup> (Master Psychology) 2013-2014
   Influence of emotional intelligence on facial expression recognition.

#### **CONTACTS FOR REFERENCES**

- Dr. Gary McKeown, Queen's University Belfast, United Kingdom (g.mckeown@qub.ac.uk)
   Postdoc supervisor
- Prof. Michel Dubois, Univ. Grenoble Alpes, France (michel.dubois@univ-grenoble-alpes.fr)
   Ph.D. supervisor
- Dr. Anna Tcherkassof, Univ. Grenoble Alpes, France (anna.tcherkassof@univ-grenoble-alpes.fr)
   Master & Ph.D. supervisor