

Damien Dupré

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DCU Business School*

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in [damien-dupre](#)

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*A French data scientist living in Dublin, interested in
affective computing, expert in time series modelling and
passionate about R.*



Research Foci

Emotion, User Experience, Facial Expression, Wearable Devices, Physiology, Human Computer Interactions, Spatial and Time Analyses



Education

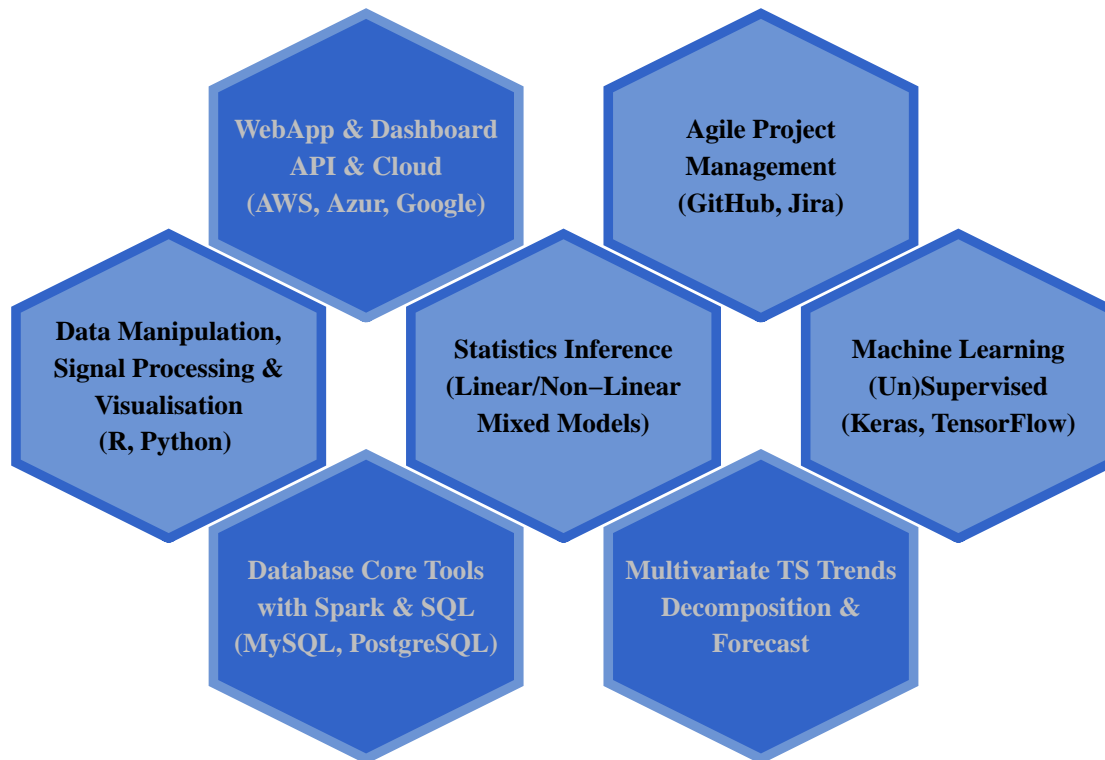
- 2016 Industrial Ph.D.. Université Grenoble-Alpes, France
- 2010 M.Sc.. Université Grenoble-Alpes, France
- 2007 B.Sc.. Université Grenoble-Alpes, France



Professional Experience

- 2018 – Now **Assistant Professor**, *Dublin City University, Ireland.*
 - Business research methods at DCU Business School
- 2018 **Academic PostDoc.**, *University College Dublin, Ireland.*
 - Athletes' performance prediction using machine learning
- 2016 – 2018 **Industrial PostDoc.**, *Sensumco Ltd., United Kingdom.*
 - Evaluation of emotions from facial and physiological measures
- 2016 **Visiting Research Fellow**, *Queen's University of Belfast, United Kingdom.*
 - Empathy skills assessment with facial expression recognition
- 2011 – 2015 **UX Researcher**, *SAS IXIADE, France.*
 - Evaluation of users' acceptance with innovative services and products
- 2010 – 2011 **Research Assistant**, *Université Grenoble-Alpes, France.*
 - Validation and dissemination of an e-learning software
- 2009 – 2013 **Research Assistant**, *Université Grenoble-Alpes, France.*
 - Development of a dynamic and spontaneous facial expressions database

⚙ Skills



📄 Patents

- Morrison, G., Mccourt, S., Mc Keown, G. J., Fyans, C., & **Dupré, D.** (2019). *Systems and methods for combining and analysing human states*. Retrieved from <https://patentscope.wipo.int/search/en/detail.jsf?docId=W02019086856>
- Morrison, G., Mccourt, S., Mckeown, G. J., Fyans, C., **Dupré, D.**, & Moore, D. S. (2019). *Systems and methods for estimating human states*. Retrieved from <https://patentscope.wipo.int/search/en/detail.jsf?docId=W02019086861>

📖 Peer-reviewed Publications

- Dupré, D.**, Andelic, N., Moore, D., Morrison, G., & McKeown, G. J. (2020). Analysis of physiological changes related to emotions during a zipline activity. *Sports Engineering*. <https://doi.org/10.1007/s12283-020-00328-9>
- Dupré, D.**, Krumhuber, E. G., Küster, D., & McKeown, G. J. (2020). A performance comparison of eight commercially available automatic classifiers for facial affect recognition. *Plos One*, 15(4), e0231968. <https://doi.org/10.1371/journal.pone.0231968>
- Dupré, D.**, Dubois, M., & Tcherkassof, A. (2018). Rôle de l'émotion dans l'acceptabilité d'un produit: évaluation des composantes cognitive, motivationnelle et subjective. *Psychologie du Travail et des Organisations*, 24(4), 313–324. <https://doi.org/10.1016/j.pto.2017.07.001>
- Dupré, D.**, Akpan, D., Elias, E., Adam, J.-M., Meillon, B., Bonnefond, N., ... Tcherkassof, A. (2015). Oudjat: A configurable and usable annotation tool for the study of facial



- expressions of emotion. *International Journal of Human-Computer Studies*, 83, 51–61. <https://doi.org/10.1016/j.ijhcs.2015.05.010>
- Dubois, M., **Dupré, D.**, Adam, J.-M., Tcherkassof, A., Mandran, N., & Meillon, B. (2013). The influence of facial interface design on dynamic emotional recognition. *Journal on Multimodal User Interfaces*, 7(1-2), 111–119. <https://doi.org/10.1007/s12193-012-0103-y>
- 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. <https://doi.org/10.5121/ijma.2013.5505>
- Dupré, D.**, Salem, H. T. A., Loiseau, M., Dessus, P., & Simonian, S. (2012). Quelques critères d'utilisation d'un système d'évaluation automatique de synthèses de cours à distance. *Recherches & Educations*, (6), 143–159. Retrieved from <https://journals.openedition.org/rechercheseducations/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 et Savoirs*, 9(4), 473–492. <https://doi.org/10.3166/DS.9.473-492>

Conference Proceedings

- Dupré, D.**, Andelic, N., Moore, D., Morrison, G., & McKeown, G. J. (2018). Multivariate body area network of physiological measures “in the wild”: A case study with zipline activity. In R. Grant, T. Allen, A. Spink, & M. Sullivan (Eds.), *Proceedings of the 11th international conference on methods and techniques in behavioral research* (pp. 217–223). Retrieved from <https://www.measuringbehavior.org/mb2018/Publications.html>
- Dupré, D.**, Andelic, N., Morrison, G., & McKeown, G. J. (2018). Accuracy of three commercial automatic emotion recognition systems across different individuals and their facial expressions. In K. David, T. Okoshi, & I. Hübener (Eds.), *Proceedings of the international conference on pervasive computing and communications workshops* (pp. 627–632). <https://doi.org/10.1109/PERCOMW.2018.8480127>
- Dupré, D.**, Andelic, N., Morrison, G., & McKeown, G. J. (2018). Dynamic analysis of automatic facial expressions recognition in the wild ‘using generalized additive mixed models and significant zero crossing of the derivatives. In R. Bond, M. Mulvenna, J. Wallace, & M. Black (Eds.), *Proceedings of the 32nd international BCS human computer interaction conference* (pp. 1–8). <https://doi.org/10.14236/ewic/HCI2018.1>
- Dupré, D.**, McKeown, G. J., Andelic, N., & Morrison, G. (2018). Willingness to share emotion information on social media: Influence of personality and social context. In F. Bonchi & F. Provost (Eds.), *Proceedings of the 5th international conference on data science and advanced analytics* (pp. 665–672). <https://doi.org/10.1109/DSAA.2018.00086>
- Dupré, D.**, Bland, B., Bolster, A., Morrison, G., & McKeown, G. J. (2017). Dynamic model of athletes’ emotions based on wearable devices. In A. Tareq (Ed.), *Proceedings of the international conference on applied human factors in sports, injury prevention and outdoor recreation* (pp. 42–50). https://doi.org/10.1007/978-3-319-60822-8_4
- Dupré, D.**, Booth, A., Bolster, A., Morrison, G., & McKeown, G. J. (2017). Dynamic analysis of automatic emotion recognition using generalized additive mixed models. In J. Bryson, M. De Vos, & J. Padget (Eds.), *Proceedings of the annual convention of the society for*

- the study of artificial intelligence and simulation for behaviour: Society with AI* (pp. 158–163). Retrieved from <http://aisb2017.cs.bath.ac.uk/proceedings.html>
- McKeown, G. J., Spencer, C., Patterson, A., Creaney, T., & **Dupré, D.** (2017). Comparing virtual reality with computer monitors as rating environments for affective dimensions in social interactions. In C. Busso & J. Epps (Eds.), *Proceedings of the 7th international conference on affective computing and intelligent interaction* (pp. 464–469). <https://doi.org/10.1109/ACII.2017.8273640>
- 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.), *Proceedings of the association internationale de psychologie du travail de langue française conference: Effets des modes d'organisation au travail* (pp. 19–30). Retrieved from <https://www.editions-harmattan.fr/index.asp?navig=catalogue&obj=livre&no=49691>
- Dupré, D.**, Tcherkassof, A., & Dubois, M. (2015). Emotions triggered by innovative products: A multi-componential approach of emotions for user experience tools. In J. Tao, T. Tan, & R. W. Picard (Eds.), *Proceedings of the 6th international conference on affective computing and intelligent interaction* (pp. 772–777). <https://doi.org/10.1109/acii.2015.7344657>
- Dupré, D.**, Dubois, M., Tcherkassof, A., & Pizelle, P. (2012). Measuring emotional states and behavioral responses to innovative design. In J. Brassett, J. McDonnell, P. Hekkert, G. Ludden, & J. van Erp (Eds.), *Proceedings of the 8th international conference on design and emotion: Out of control* (pp. 1–8). <https://doi.org/10.5281/zenodo.2596981>
- 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.), *Proceedings of the environnements informatiques pour l'Apprentissage humain conference: A la recherche des convergences entre les acteurs des eiaH* (pp. 287–299). Retrieved from <https://hal.archives-ouvertes.fr/hal-00598788>
- Dupré, D.**, Dubois, M., Mandran, N., & Tcherkassof, A. (2010). Emotional facial expression interface: Effects of displayed facial designs. In G. Calvary & M. Wolff (Eds.), *Proceedings of the ergonomie et informatique avanche conference* (pp. 37–43). <https://doi.org/10.1145/1868650.1868657>
- Meillon, B., Tcherkassof, A., Mandran, N., Adam, J.-M., Dubois, M., **Dupré, D.**, ... 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 international workshop series on multimodal corpora, tools and resources. Multimodal corpora: Advances in capturing, coding and analyzing multimodality* (pp. 31–36). Retrieved from <http://www.lrec-conf.org/proceedings/lrec2010/workshops/W6.pdf>

Talks

- July 22, 2020 **Facial and physiological expressions of emotion, with a look at bias**, **Dupré, D.**, Online.
 CX Emotion Conference
- July 9, 2020 **Data analytics for behavioral research**, **Dupré, D.**, Online.
 Summer School on Behavioral and Neuroscientific Research for Economics, Finance and Accounting

- July 2, 2019 **Data analytics for behavioral research**, Dupré, D., Dublin, Ireland.
 ○ Summer School on Behavioral and Neuroscientific Research for Economics, Finance and Accounting
- July 11-13, 2019 **Accuracy of automatic emotion recognition from voice**, Dupré, D. & McKeown, G. J., Amsterdam, The Netherlands.
 ○ Conference of the International Society for Research on Emotion
- April 4-6, 2018 **A comparison of three commercial systems for automatic recognition of spontaneous facial expressions**, Dupré, D. & McKeown, G. J., Glasgow, United Kingdom.
 ○ Consortium of European Research on Emotion
- July 26-29, 2017 **Physiological correlates of emotions "in the wild": A case study with mountain bikers.**, Dupré, D., Morrison, G., & McKeown, G. J., St. Louis, Missouri.
 ○ Conference of the International Society for Research on Emotion
- October 22-23, 2014 **Introduction à l'expérience utilisateur émotionnelle : Quels sont les impacts des émotions suscitées des produits innovants sur les perceptions et les réactions des utilisateurs ?**, Dupré, D., Tcherkassof, A. & Dubois, M., Grenoble, France.
 ○ Colloque TechnUse: De l'acceptabilité à l'usage des technologies innovantes
- October 11-13, 2014 **Oudjat: A configurable and usable annotation tool for the study of facial expression.**, Dupré, D., Meillon, B. & Tcherkassof, A., Porto, Portugal.
 ○ World Congress on Facial Expression of Emotion
- October 11-13, 2014 **Spontaneous and dynamic emotional facial expressions reflect action readiness.**, Tcherkassof, A. & Dupré, D., Porto, Portugal.
 ○ World Congress on Facial Expression of Emotion
- March 26-28, 2016 **Are approach-avoidance relevant cues of the Emotional User eXperience? Case studies with innovative products.**, Dupré, D., Pizelle, P., Dubois, M. & Tcherkassof, A., Berlin, Germany.
 ○ Consortium of European Research on Emotion
- December 5-6, 2013 **Mesurer de l'expérience utilisateur émotionnelle de produits innovants: Quels paradigmes et outils?**, Dupré, D., Pizelle, P., Dubois, M. & Tcherkassof, A., Grenoble, France.
 ○ Les Doctorales de l'Innovation
- April 22-24, 2010 **Online recognition of dynamic and spontaneous facial expression.**, Dupré, D. & Tcherkassof, A., Villeneuve d'Ascq, France.
 ○ Consortium of European Research on Emotion

Posters

- March 23-25, 2017 **Empathy and social status: The interplay between perceptions of empathy expression and social status.**, Spencer, C., McKeown, G. & Dupré, D., Vienna, Austria.
 ○ International Convention of Psychological Science

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

Grants

- 2020 **Innovation Voucher**, €5,000.
 o Enterprise Ireland
- 2016 **Knowledge Transfer Partnership Post-Doctoral Fellowship**, £50,000.
 o Innovate UK
- 2014 **Software Development**, €3,000.
 o Pole Grenoble Cognition
- 2013 **Software Development**, €3,000.
 o Pole Grenoble Cognition
- 2012 **DynEmo Database Valorisation**, €4,000.
 o Université Grenoble-Alpes
- 2011 **Doctoral Fellowship**, €80,000.
 o Association Nationale Recherche Technologie

Projects

WebApp Development

- VAD Dashboard and API: Realtime processing and visualization of IoT devices (undisclosed)
- Motoklik Dashboard and API: ML prediction of optimal motorbike suspensions (undisclosed)
- DCU R Tutorials: Interactive learning environment for students 🔗

Software Development

- Oudjat: Continuous batch annotation of videos 🔗
- Pensum: Support for e-learning activities 🔗

Database Development

- DynEmo: Spontaneous and dynamic facial expressions 🔗
- Machine Challenge: Comparison of commercially available classifier 🔗

Teaching Experience

with	what
Ph.D. Students	Advanced Quantitative Research Methods (IE)
	Introduction to R for Data Science (UK, IE)
Postgraduates	Data Analytics and Visualisation (IE)
	Data Analytics for Accounting and Business (IE)
	Data Science for Organisational Psychology (FR)
	Social Cognition and Emotions (FR)
	Strategic Consultancy Project and Data Analytics (IE)
Undergraduates	Introduction to Organisational Psychology (FR)
	Introduction to Psychology (FR)
	Social Psychology (FR)

Academic Responsibilities

- Program Chair of the Global Business Degree - Dublin City University (2020 - Now)
- Country Coordinator for the Global Business Degree - Dublin City University (2019 - 2020)
- Member of the Academic Council – Université Grenoble-Alpes (2012 – 2014)
- Delegate of Ph.D. students - Laboratoire Interuniversitaire de Psychologie (2013 – 2015)