Curriculum Vitae

Michel Ballings

October 30, 2023

Contact Information

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Education and Qualifications

2008–2014 Ph.D. in Applied Economic Sciences, Ghent University

Title: Advances and Applications in Ensemble Learning

Advisor: Prof. dr. Dirk Van den Poel (Dirk.VandenPoel@UGent.be)

2006–2008 Master in Business Economics, VLEKHO Business School Brussels

(Magna cum laude, Ranking: 1st)

2003–2006 Bachelor in Business Administration, Leuven University College

(Cum laude)

- Haute Ecole d'Enseignement Supérieur de Namur, Belgium (one semester, 2005)
- Universidad de Màlaga, Spain (one semester, 2005 2006)

Professional Experience

Amazon

07/2023– Amazon Visiting Academic - Research Scientist at Amazon Ads (full time / sabbatical)

 $08/2021 - 07/2023 \quad \text{Amazon Visiting Academic - Research Scientist at Amazon at Ads (part-time)}$

University of Tennessee, Haslam College of Business, Dpt of Business Analytics and Statistics

08/2022 — Associate Professor in Data Engineering, Deep Learning and Deep Reinforcement Learning

08/2021-05/2023 Director of the JTV Center Intelligence Lab at the Department of Business Analytics

08/2014-07/2022 Assistant Professor in Data Engineering, Deep Learning and Deep Reinforcement Learning

Ghent University, Faculty of Economics and Business Administration, Dpt of Marketing

 $10/2014-10/2017 \quad \hbox{Visiting Professor of Social Media and Web Analytics (part-time)}$

09/2008-06/2014 Research and teaching assistant

Psilogy

06/2008-12/2010 Consultant

AB InBev

08/2006–06/2008 Internship (Master's level)

03/2006-06/2006 Internship (Bachelor's level)

Languages

Dutch Native speaker

English Full professional proficiency

French Professional proficiency

Spanish Elementary proficiency

Professional Recognition

Fellowships

2022-2023	James and Joanne Ford Faculty Research Fellowship
2021-2022	James and Joanne Ford Faculty Research Fellowship
2020-2021	Haslam College of Business Research Fellowship
2019-2020	Janet and Jeff Davis Faculty Research Fellowship
2018-2019	Nancy and David McKinney Faculty Research Fellowship

Awards

2022 MSBA Faculty Excellence in Teaching Award, Haslam College of Business, The University of Tennessee, 04/29/2022

MSBA Faculty Outstanding Commitment to Students Award, Haslam College of Business, The University of Tennessee, 04/29/2022

2021 Finalist for the Haslam College of Business Excellence in Teaching Award, Haslam College of Business, The University of Tennessee, 04/2021

2020 MSBA Faculty Excellence in Teaching Award, Haslam College of Business, The University of Tennessee, 11/21/2020

- 2019 MSBA Faculty Outstanding Commitment to Students Award, Haslam College of Business, The University of Tennessee,11/11/2019
- 2018 2017 Thomas P. Hustad JPIM Best Paper Award.
- 2017 Finalist for the 2017 Chancellor's Excellence in Teaching Award, The University of Tennessee, 01/11/2017
- 2016 MSBA Faculty Excellence in Teaching Award, Haslam College of Business, The University of Tennessee, 11/11/2016
- 2014 MSBA Faculty Excellence in Teaching Award, Haslam College of Business, The University of Tennessee, 12/12/2014

Publications

Refereed Journal Articles

- 2022 18. Neeraj Bharadwaj, Michel Ballings, Prasad Naik, Miller Moore, Murat Arat. A New Livestream Retail Analytics Framework to Assess the Sales Impact of Emotional Displays. Journal of Marketing. 86(1), 27-47. Impact Factor: 5.266. FT50 Journal.
- 2021 17. Matthias Bogaert, Michel Ballings, Dirk Van den Poel, Asil Oztekin (2021). Box Office Sales and Social Media: A Cross-Platform Comparison of Predictive Ability and Mechanisms. Decision Support Systems. 147(August 2021), 113517, Impact Factor: 4.721.
 - 16. Matthias Bogaert, Michel Ballings, Rob Bergmans, Dirk Van den Poel (2021). Predicting Self-declared Movie Watching Behavior using Facebook Data and Information-Fusion Sensitivity Analysis. Decision Sciences. 52(3), Published online on 23 July 2019, 776-810.
- 2020 **15.** Neeraj Bharadwaj, Michel Ballings, Prasad Naik (2020). Cross-Media Consumption: Insights From Super Bowl Advertising. Journal of Interactive Marketing. 50. 17-31. Impact factor: 4.691
- 2019 **14.** Matthijs Meire, Kelly Hewett, Michel Ballings, V. Kumar, Dirk Van den Poel (2019) The Role of Marketer Generated Content in Customer Engagement Marketing. Journal of Marketing. 83(6), 21-42. Impact factor: 7.821, FT50 journal. **Featured in March-April 2020 issue of Harvard Business Review**
 - 13. Matthias Bogaert, Justine Lootens, Dirk Van den Poel, Michel Ballings (2019). Evaluating Multi-Label Classifiers and Recommender Systems in the Financial Service Sector. European Journal of Operational Research. 279(2), 620-634.
- 2018 **12.** Michel Ballings, Heath McCullough, Neeraj Bharadwaj (2018). Cause Marketing and Customer Profitability. Journal of the Academy of Marketing Science. 46(2), pp 234-251. March 2018. Impact factor: 5.888, FT50 journal.
- 2017 11. Matthijs Meire, Michel Ballings, Dirk Van den Poel (2017). The Added Value of Social Media Data in B2B Customer Acquisition Systems: A Real-life Experiment. Decision Support Systems. 104. pp26-37. December 2017. Impact factor: 3.222
 - 10. Matthias Bogaert, Michel Ballings, Martijn Hosten, Dirk Van den Poel (2017). Identifying Soccer Players on Facebook through Predictive Analytics. Decision Analysis. 14(4), 227-300. December 2017. Impact factor: 2.143
 - 9. Steven Hoornaert, Michel Ballings, Edward C. Malthouse, Dirk Van den Poel (2017). Identifying New Product Ideas: Waiting for the Wisdom of the Crowd or Screening Ideas in Real Time, Journal of Product Innovation Management. 34(5). pp 580-597. September 2017. Impact factor: 2.086. Thomas P. Hustad JPIM Best Paper Award. Top 20 most downloaded paper in JPIM in year following publication.
- 8. Matthias Bogaert, Michel Ballings, Dirk Van den Poel (2016). Evaluating the Importance of Different Communication Types in Romantic Tie Prediction on Social Media, Annals of Operations Research. August 17, p1-26. Impact factor: 1.406

- 7. Matthijs Meire, Michel Ballings, Dirk Van den Poel (2016). The Added Value of Auxiliary Data in Sentiment Analysis of Facebook Posts, Decision Support Systems. 89, February 2016, p98-112. Impact factor: 2.604
- **6.** Matthias Bogaert, Michel Ballings, Dirk Van den Poel (2016). The Added Value of Facebook Friends Data in Event Attendance Prediction, Decision Support Systems. 82, February 2016, p26-34. Impact factor: 2.313
- 5. Michel Ballings, Dirk Van den Poel, and Matthias Bogaert (2016). Social Media Optimization: Identifying an Optimal Strategy for Increasing Network Size on Facebook, Omega, The International Journal of Management Science, 59(A), March 2016, 15-25. Impact factor: 4.376
- 4. Michel Ballings, Dirk Van den Poel, Nathalie Hespeels, and Ruben Gryp (2015). Evaluating Multiple Classifiers for Stock Price Direction Prediction, Expert Systems with Applications, 42(20), 15 November 2015, p7046-7056. Impact factor: 2.240
 - 3. Michel Ballings and Dirk Van den Poel (2015). CRM in Social Media: Predicting Increases in Facebook Usage Frequency, European Journal of Operational Research, 244(1), 1 July 2015, p248-260. Impact factor: 2.358, Top 25 most downloaded article in EJOR April to June 2015
- 2013 2. Michel Ballings and Dirk Van den Poel (2013). Kernel factory: An ensemble of kernel machines. Expert Systems with Applications, 40(8), 15 June 2013, p2904-2913. Impact factor: 1.965
- 2012 **1.** Michel Ballings and Dirk Van den Poel (2012). Customer event history for churn prediction: How long is long enough? Expert Systems with Applications, 39(18), 15 December 2012, p13517-13522. Impact factor: 1.854

Conference Papers

- 2016 5. Dirk Van den Poel, Celine Chesterman, Maxim Koppen and Michel Ballings, Equity Price Direction Prediction For Day Trading: Ensemble Classification using Technical Analysis Indicators with Interaction Effects, 2016 IEEE Congress on Evolutionary Computation (CEC), 3455-3462, 24-29 July 2016, Vancouver, Canada.
- 4. Michel Ballings and Dirk Van den Poel (2013). Using Eye-Tracking Data of Advertisement Viewing Behavior to Predict Customer Churn. In 2013 IEEE 13th International Conference on Data Mining Workshops (ICDMW 2013), 7 December 2013, Dallas, Texas, USA.
 - 3. Michel Ballings and Dirk Van den Poel (2013). The dangers of using intention as a surrogate for retention in brand positioning decision support systems. In M. Spiliopoulou and L. Schmidt-Thieme, editors, Studies in Classification, Data Analysis, and Knowledge Organization, page 8. Hildesheim, Germany.
- 20. Michel Ballings, Dirk Van den Poel, and Emmanuel Verhagen (2012). Improving customer churn prediction by data augmentation using pictorial stimulus-choice data. In J. Casillas, F. J. Martinez Lopez, and J. M. Corchado, editors, Management Intelligent Systems, volume 171, pages 217-226. Springer-Verlag Berlin, Berlin.
- 2011 1. Michel Ballings, Dries F. Benoit, and Dirk Van den Poel (2011). RFM variables revisited using quantile regression. In M. Spiliopoulou, W. Haixun, D. Cook, P. Jian, W. Wei, O. Zaiane, and W. Xindong, editors, 2011 IEEE International Conference on Data Mining Workshops, pages 1163-1169. Vancouver, Canada.

Articles in Popular Press

- 07/19/2023 Michel Ballings, The Challenges of Mitigating Bias in Generative AI, AI Business.
- 08/02/2023 Michel Ballings, The Possibilities and Risks Presented by Generative AI, Solutions Review.
- 07/19/2021 Michel Ballings, Neeraj Bharadwaj, Prasad Naik, Why livestreamers should sell their products with a poker face not a smile, The Conversation.

Books

Fall 2022 Michel Ballings, Dirk Van den Poel (2022). Hands-On Data Engineering with R, Python and PostgreSQL, Amazon KDP.

Research Stays

Summer 2015 Research visit, Northwestern University, Medill, Integrated Marketing Communications, Chicago, Evanston, July 5- August 14, 2015

Classes Taught

UT: The University of Tennessee, GU: Ghent University

- Spring 2023 43. UT: BZAN 558: Deep Reinforcement Learning for Business Applications, 24 students, Mean of student evaluations: 4.90
 - **42.** UT: BZAN 554: Deep Learning for Business, 38 students, Mean of student evaluations: 4.74
 - **41.** UT: UT: BZAN 550 Business Analytics Experience Capstone: Faculty Coach (no evaluations)
 - Fall 2022 **40.** UT: BZAN 545: Data Engineering for Business, students, 46 students, Mean of student evaluations: 4.81/5
- Spring 2022 **39.** UT: UT: BZAN 550 Business Analytics Experience Capstone: Faculty Coach (no evaluations)
 - **38.** UT: BZAN 545: Deep Learning for Business Applications, 33 students, Mean of student evaluations: 4.85/5
 - $\bf 37.~$ UT: BZAN 583: Deep Reinforcement Learning for Business Applications, 23 students, Mean of student evaluations: 4.78/5
 - Fall 2021 **36.** UT: BZAN 554: Deep Learning for Business, 33 students, Mean of student evaluations: 4.83/5
 - $\bf 35.~$ UT: BZAN 545: Data Engineering for Business, 36 students, Mean of student evaluations: 4.83/5
- Spring 2021 **34.** UT: BZAN 545: Data Engineering for Business, 46 students, Mean of student evaluations: 4.86/5
 - Fall 2020 **33.** UT: BZAN 583: Deep Reinforcement Learning for Business Applications, 21 students, Mean of student evaluations: 4.78/5
 - **32.** UT: BZAN 554: Deep Learning for Business Applications, 12 students, Mean of student evaluations: 4.69/5
- Spring 2020 **31.** UT: BZAN 545: Database and Big Data Technologies, 39 students, Mean of student evaluations: 4.49/5
 - **30.** UT: BZAN 542: Data Mining Methods for Business Applications, 40 students, Mean of student evaluations: 4.52/5
 - Fall 2019 29. UT: BZAN 554: Customer Analytics: 30 students, Mean of student evaluations: 3.99/5
 - **28.** UT: BAS476: Data Engineering and Visualization in Python: 24 students, Mean of student evaluations: 4.54/5
- Spring 2019 **27.** UT: BZAN 583: Deep Learning for Business Applications, 16 students, Mean of student evaluations: 4.68/5
 - **26.** UT: BZAN 542: Data Mining Methods for Business Applications, 43 students, Mean of student evaluations: 4.60/5

- Fall 2018 **25.** UT: BZAN 550 Business Analytics Experience Capstone: Faculty coach for 2 teams (no evaluations)
 - 24. UT: BZAN 554: Customer Analytics, 30 students, Mean of student evaluations: 4.31/5
- Spring 2018 **23.** UT: BZAN 542: Data Mining Methods for Business Applications, 45 students, Mean of student evaluations: 4.53/5
 - Fall 2017 22. UT: BZAN 554: Customer Analytics, 22 students, Mean of student evaluations: 3.88/5
- Spring 2017 **21.** GU: F000799: Social Media and Web Analytics, 2017, 40 students, Mean of student evaluations: 4.37/5
 - **20.** UT: BZAN 542: Data Mining Methods for Business Applications, 43 students, Mean of student evaluations: 4.35/5
 - Fall 2016 19. UT: BZAN 554: Customer Analytics, 24 students, Mean of student evaluations: 4.59/5
 - 18. UT: BAS 474: Data Mining and Business Analytics, 101 students, Mean of student evaluations: 3.28/5
- Spring 2016 17. UT: BZAN 542: Data Mining Methods for Business Applications, 45 students, Mean of student evaluations: 4.11/5
 - 16. UT: BAS 474: Data Mining and Business Analytics, 47 students, Mean of student evaluations: 3.50/5
 - **15.** GU: F000799: Social Media and Web Analytics, March 14-17, 2016, 41 students, Mean of student evaluations: 4.34/5
 - Fall 2015 14. UT: BZAN 554: Customer Analytics, 15 students, Mean of student evaluations: 4.54/5
- Spring 2015 **13.** UT: BZAN 542: Data Mining Methods for Business Applications, 47 students, Mean of student evaluations: 3.95/5
 - 12. GU: F000799: Social Media and Web Analytics, March 13-19, 2015, 38 students, Mean of student evaluations: 4.10/5
 - 11. UT: BZAN 550 Business Analytics Experience Capstone: Faculty coach (no evaluations)
 - Fall 2014 **10.** UT: STAT 583, Section 2: Marketing Analytics. 18 students, Mean of student evaluations: 4.43/5
 - 9. UT: BZAN 550 Business Analytics Experience Capstone: Faculty coach (no evaluations)
- Spring 2014 8. GU: TA in Marketing Models and Marketing Engineering (R)
- Spring 2013 7. GU: TA in Marketing Models and Marketing Engineering (R)
 - Fall 2012 6. GU: TA in Marketing Information Systems DB Marketing ((PL/)SQL, ODM)
 - Fall 2011 5. GU: TA in Marketing Information Systems DB Marketing ((PL/)SQL, ODM)
 - Fall 2010 4. GU: TA in Marketing Information Systems DB Marketing ((PL/)SQL, ODM)
 - 3. GU: TA in Analytical Customer Relationship Management (SAS)
 - Fall 2009 2. GU: TA in Analytical Customer Relationship Management (SAS)
 - Fall 2008 1. GU: TA in Analytical Customer Relationship Management (SAS)

Software

2015 **9.** Steven Hoornaert, Michel Ballings, and Dirk Van den Poel (2015). R package lift: Compute the Top Decile Lift and Plot the Lift Curve.

- 8. Matthias Bogaert, Michel Ballings, and Dirk Van den Poel (2015). R package AggregateR: Aggregate Numeric and Categorical Variables by an ID.
- 7. Matthijs Meire, Michel Ballings, and Dirk Van den Poel (2015). R package imputeMissings: Impute Missing Values in a Predictive Context
- **6.** Michel Ballings, and Dirk Van den Poel (2015). R package rotationForest: Fit and Deploy Rotation Forest Models.
- 2014 **5.** Michel Ballings, and Dirk Van den Poel (2014). R package interpretR: Binary Classifier Interpretation functions.
 - **4.** Michel Ballings, and Dirk Van den Poel (2014). R package dummy: Automatic creation of dummy variables with support for predictive modeling.
- 2013 3. Michel Ballings, Dauwe Vercamer, and Dirk Van den Poel. Hybrid Ensemble: An R package for Hybrid Ensemble classification
 - 2. Michel Ballings, and Dirk Van den Poel. AUC: Threshold independent performance measures for probabilistic classifiers.
- 2012 **1.** Michel Ballings, and Dirk Van den Poel (2013). R package kernelFactory: an ensemble of kernel machines.

Presentations and Talks

Seminar/Webinar Presentations

- 9. Seminar: Michel Ballings. A New Livestream Retail Analytics Framework to Assess the Sales Impact of Emotional Displays. UC Davis, Graduate School of Management, February 10, 2022.
- **8.** Webinar: Michel Ballings. A New Livestream Retail Analytics Framework to Assess the Sales Impact of Emotional Displays. Amazon Ads, June 29, 2021.
 - 7. Webinar: Michel Ballings. A New Livestream Retail Analytics Framework to Assess the Sales Impact of Emotional Displays. HEC Lausanne, Department of Marketing, June 2, 2021.
- 2019 6. Webinar: Kelly Hewett, Michel Ballings. The Role of Marketer Generated Content in Customer Engagement Marketing. American Marketing Association. September 11, 2019
- 5. Seminar: Michel Ballings. The Power of Facebook to Predict Customer Acquisition and Defection. Seminar Talk. Northwestern University, Medill School of Journalism, Media, Integrated Marketing Communications, IMC, February 12, 2015
- 2014 4. Seminar: Michel Ballings. Social Media Analytics. Seminar Talk. The University of Tennessee, Haslam College of Business, Department of Management, November 4, 2014
 - **3.** Seminar: Michel Ballings. Advances in Social Media Analytics. Seminar Talk. The University of Tennessee, College of Engineering, Department of Industrial and Systems Engineering, October 3, 2014
- 2012 2. Seminar: Michel Ballings. Resolutions to Having Too Much or Too Little Data. Top Management aCRM Training, Ghent University, College of Economics and Business Administration, Department of Marketing, August 10, 2012.
- 2011 1. Seminar: Michel Ballings. Data Augmentation for CRM. Executive Course: Predictive Analytics for Customer Intelligence in Financial Services, Ghent University, College of Economics and Business Administration, Department of Marketing, August 18, 2011.

Conference Presentations

2021 18. Michel Ballings, A New Livestream Retail Analytics Framework to Assess the Sales Impact of Emotional Displays, Digital Loyalty Revolution Conference, Osservatorio Fedelta, Parma, Italy, Invited online talk, October 15, 2021

- 2020 17. Neeraj Bharadwaj, Michel Ballings, Prasad Naik, Miller Moore, Murat Arat. Purchase Impact of a Salesperson's Facial Expressions: Large-scale Video Analysis Using Deep Learning, American Marketing Association, San Diego, CA, Feb 15, 2020
 - 16. Michel Ballings, Brandon Bell, Senne Van Steelandt. Social Media, Towards Social Media Automation, American Marketing Association, San Diego, CA, Feb 15, 2020
- 2019 **15.** Michel Ballings, Brandon Bell, Senne Van Steelandt. Social Media Optimization using Deep Reinforcement Learning, INFORMS Annual Meeting, Seattle, WA, October 22, 2019
 - 14. Michel Ballings, Neeraj Bharadwaj, Prasad Naik, Miller Moore, Murat Arat. But Wait, There's More! Deep Learning of Sales Elasticity of Sales Pitches. Theory + Practice in Marketing, Columbia University, New York, NY, May, 18, 2019
 - 13. Michel Ballings. Deep Learning: Motivation, Concepts, Implementation. INFORMS Meeting of Analytics Program Directors, Austin, TX, April, 13, 2019
 - 12. Murat Arat, Michel Ballings, Miller Moore. Maximizing Insights from Customer Data Streams, Interactive Marketing Research Conference, Houston, TX, March, 28, 2019
 - 11. Matthijs Meire, Kelly Hewett, Michel Ballings, V. Kumar and Dirk Van den Poel. Linking Experiential Event Outcomes and Customer Sentiment: The Moderating Role of Marketer Generated Content, American Marketing Association, TX, Austin, Feb 24, 2019
- 2017 10. Michel Ballings, Review of Business Strategy Problems in Social Media Analytics. IN-FORMS Annual Meeting 2017, Session Title: Ideas And Discussions Relating to the Future of Social Media Analytics Research, Cluster: Social Media Analytics, TX, Houston, October 22, 2017
- 2016 9. Rachel Van Deventer, Ryan Erwin, Miller Moore, Michel Ballings, Dirk Van den Poel. Evaluating Prediction Models for Targeting Product Reviewers, INFORMS Annual Meeting 2016, Session Title: Mining and measuring user ties, product ideas, product reviewers, and behavioral consumer engagement, Cluster: Social Media Analytics, TN, Nashville, November 13-16, 2016
 - 8. Steven Hoornaert, Michel Ballings, Edward C. Malthouse, Dirk Van den Poel. Identifying New Product Ideas: Waiting for the Wisdom of the Crowd or Screening Them in Real-time? 2016 JPIM/MSI Research Workshop: Innovation in Data-Rich Environments, Knoxville, TN, June 8-10, 2016
- 7. Michel Ballings, Matthijs Meire, and Dirk Van den Poel. The Power of Facebook to Predict Customer Acquisition and Defection. INFORMS Annual Meeting 2015, Session Title: Predicting Customer Behavior using Facebook Data, Cluster: Social Media Analytics, Philadelphia, Pennsylvania, USA, November 1-4, 2015
 - 6. Michel Ballings, Matthijs Meire, and Dirk Van den Poel. Predicting Customer Acquisition using Facebook. NYU 2015 Conference on Digital Big Data, Smart Life, Mobile Marketing Analytics. NYU Stern, New York, USA, October 23, 2015
- 2014 5. Michel Ballings and Dirk Van den Poel. CRM in Social Media: Predicting Increases in Facebook Usage Frequency. INFORMS Annual Meeting 2014, Session Title: Predictive Analytics for Social Media, Cluster: Artificial Intelligence, San Francisco, USA, November 9-12, 2014
- 2013 4. Michel Ballings and Dirk Van den Poel. Evaluating multiple weight estimation methods in hybrid ensembles. The 2nd Annual Conference of the Dutch/Flemish Classification Society (VOC), Antwerp, Belgium, May 31, 2013
- 3. Michel Ballings and Dirk Van den Poel. The dangers of using intention as a surrogate for retention in brand positioning decision support systems. The 36th Annual Conference of the German Classification Society (GFKL), Hildesheim, Germany, August 1-3, 2012
 - 2. Michel Ballings and Dirk Van den Poel. Improving customer churn prediction by data augmentation using pictorial stimulus-choice data. International Symposium on Management Intelligent Systems, Salamanca, Spain, May 22-14, 2012
- 2011 1. Michel Ballings and Dirk Van den Poel. Data Augmentation in Customer Intelligence using Pictorials. 2011 Joint Statistical Meetings, Miami, USA, July 30- August 4, 2011

Service

Internal Service

2023 Member of the AI Visioning Working Group Director of the JTV Center Intelligence Lab MSBA committee member Department Review Chair (DRC) 2022 Participation in AACSB accreditation review (03/21/2022) Director of the JTV Center Intelligence Lab MSBA committee member Department Review Chair (DRC) 2021 HCB New Faculty Orientation Teaching Tips Panel member (08/12/2021) Director of the JTV Center Intelligence Lab Department Review Chair (DRC) MSBA committee member Faculty search committee member 2020 Department Review Chair (DRC) MSBA committee member 2019 Department Review Chair (DRC) MSBA committee member PhD committee member Research presentation BUAD317 (March 25, 2019) 2018 Department Review Chair (DRC) MSBA committee member Forum advisory committee member 2017 Talk at Fall Business Analytics Forum: Social Media and Customer Analytics Organizer of the Hackathon for our Fall Business Analytics Forum Judge in the Hanes Brands Inc MSBA case competition, Apr 28, 2017 Department Review Chair (DRC) MSBA committee member Forum advisory committee member 2016 Talk: Dean's Advisory Council Meeting, The Predictive Enterprise, Nov 11, 2016 Talk: Business Analytics Forum, The Added Value of Social Media in Sentiment Analysis, Sep 15, 2016

Department Review Chair (DRC) (Starting Aug 5st, 2016)

MSBA committee member (Starting July 1st, 2016)

Judge in the Hanes Brands Inc MSBA case competition, Apr 29, 2016

Committee member Haslam Distinguished Speaker Series

Business Analytics Forum Committee member

2015 Development of an analytical student success management system

Business Analytics Forum Committee member (Starting Jul. 1, 2015)

Talk: Business Analytics Forum, The Power of Facebook to Predict Customer Acquisition and Defection, April 20

Journal rankings committee member

2014 Talk: The Twin Tools of Predictive Analytics and Testing, at FedEX Operation Research and Management Science (FORMS) Conference in Memphis, University of Memphis, September 16

Search committee member for two new Faculty members at the Assistant Professor level

Service to the Research Community - Societies, Organizations, Conferences

- 2022 President Emeritus of the INFORMS Social Media Analytics Section
- 2021 President of the INFORMS Social Media Analytics Section

Session Chair - Best Student Paper Award

2020 President of the INFORMS Social Media Analytics Section

Social Media Analytics Cluster Chair at the INFORMS 2020 Annual Meeting

2019 Vice President of the INFORMS Social Media Analytics Section

Session chair, Session Title: Neural Networks and Sensory Marketing, Theory + Practice in Marketing, Columbia University, New York, NY, May, 18, 2019

Session chair, Session Title: Deep Learning, INFORMS Meeting of Analytics Program Directors, Austin, TX, April, 13, 2019

Session chair, Session Title: Using Machine Learning to Model Interactivity, Interactive Marketing Research Conference, Houston, TX, March, 28, 2019

- 2017 Organizer of the Social Media Analytics Section (INFORMS) student paper competition and session chair, Session Title: Social Media Analytics Best Student Paper Competition, USA, TX, Houston, October 22, 2017
- 2016 Session chair, Session Title: Business Applications in Social Media Analytics, Cluster: Social Media Analytics, INFORMS Annual Meeting 2016, USA, Tennessee, Nashville, November 13-16, 2016
- 2015 Referee for a grant proposal for the Research Foundation Flanders (FWO)(Belgium), May 22, 2015

Session chair, Session Title: Predicting Customer Behavior using Facebook Data, Cluster: Social Media Analytics, INFORMS Annual Meeting 2015, USA, Philadelphia, Pennsylvania, November 1-4, 2015.

2014 Member of project evaluation committee for IWT (Agency for Innovation by Science and Technology), Belgium, Brussels, May, 28, 2014

Service to the Research Community - Refereeing (ad hoc)

Since 2021 Journal of Interactive Marketing

Since 2019 Production and Operations Management

Since 2016 Decision Sciences

Electronic Commerce Research and Applications

Neural Computing and Applications

Computational Statistics and Data Analysis

The R Journal

Decision Support Systems

Annals of Operations Research

Since 2015 Journal of the Operational Research Society

European Journal of Operational Research

Since 2014 MIS Quarterly

Omega, The International Journal of Management Science

Expert Systems with Applications

Since 2013 Journal of the Association for Information Science and Technology

Grants

2019 - 2021	\$810,000 (spread over three years) from JTV for research on Deep Reinforcement Learning for
	Marketing Science

- 2018 \$5000 Teaching Innovation and Development Grant from the Haslam College of Business for a GPU enabled server
- 04/27/2016 \$2000 Research Accelerator Grant from the Marketing Science Institute for New Product Development research with Steven Hoornaert, Michel Ballings, Edward C. Malthouse, Dirk Van den Poel
- 05/28/2015 \$4300 Research Grant from the Marketing Science Institute for Social Media Analytics research with Kelly Hewett, Michel Ballings, Matthias Bogaert, Dirk Van den Poel, research grant #4-1925,

Advising

Ph.D. Student Advising

08/2018- $05/2023$	Advisor to Senne Van Steelandt. Generative Machine Learning Models in Healthcare Applications University of Tennessee.
10/2016- $05/2020$	Advisor to Mustafa Murat Arat. Advances and Applications in Deep Learning. University of Tennessee.
05/2016	Statistics advisor to Yufei Yu. Topic: Sentiment Analysis. University of Tennessee.
06/01/2014- 06/20/2018	Co-advisor to Matthijs Meire. A Marketing Perspective on Social Media Usefulness. Ghent University.
09/01/2014- 06/28/2018	Co-advisor to Matthias Bogaert. Harnessing the Power of Social Media in Predictive Analytics. Ghent University.

Ph.D. Dissertation Committee Member

05/2023	Senne Van Steelandt. Generative Machine Learning Models in Healthcare Applications
09/2021	Giselle van Dongen. Open Stream Processing Benchmark: an Extensive Analysis of Distributed Stream Processing Frameworks
05/2020	Mustafa Murat Arat. Advances and Applications in Deep Learning. University of Tennessee.

Undergraduate Student Advising

2021-2022	Jack Hutchins (Melton Scholarship), Topic: Quantitative Finance
2019-2020	Tanner Noah Beasley (Melton Scholarship), Topic: Dynamic Pricing
2018-2019	Brandon Bell (Melton Scholarship), Topic: Natural Language Generation
2017-2018	Nicklaus Christopher Brown (Melton Scholarship), Topic: Social Media Analytics
2017-2018	Thao Tran (Melton Scholarship), Topic: Web Analytics
2015-2016	Rachel Melba Van Deventer (Global Leadership Scholar, Business Honors Program), Topic: Amazon Review Analytics

Professional Memberships

Since 2015	American Marketing Association (AMA)
Since 2014	The Institute for Operations Research and Management Sciences (INFORMS)
Since 2013	Dutch/Flemish Classification Society (VOC)
Since 2011	Foundation for Open Access Statistics (FOAS)