

Ghent University  
Faculty of Economics and  
Business Administration

## Matthias Bogaert (PhD)

**Assistant Professor at UGent**

Tweakerkenstraat 2  
9000 Gent (Belgium)

Phone (BE): +32 497 22 08 15

Mail (work) : [matthias.bogaert@ugent.be](mailto:matthias.bogaert@ugent.be)

Mail (private) : [matth.bogaert@gmail.com](mailto:matth.bogaert@gmail.com)

Website: [github.com/MatthBogaert](https://github.com/MatthBogaert)

### Summary

I am currently employed as an assistant professor of Data Analytics at the Research Group Data Analytics at UGent. My research focusses on applications of descriptive, predictive and prescriptive analytics in business. I see myself as an applied researcher that uses data mining and statistical methods to solve relevant business-related problems. My methodological interests are data mining, ensemble modelling, deep learning, text mining, and recommender systems. My theoretical interests are social media, CRM, finance, and online WOM.

### Education

#### PhD in Business Economics

2014 – 2018 Ghent University

**Title doctoral dissertation:** Harnessing the Power of Social Media in Predictive Analytics.

**Supervisors:** Prof. Dr Dirk Van den Poel and Prof. Dr Michel Ballings

**Examination Board:** Prof. Dr Patrick Van Kenhove, Prof. Dr Dries Benoit, Prof. Dr Bart Larivière, Prof. Dr Bart Baesens, Prof. Dr Koen De Bock

#### Master of Science in Applied Economics: Business Engineering, Marketing Engineering /Data Analytics

2012 – 2014 Ghent University

**Grade:** Magna cum laude (800/1000)

#### Université des Sciences sociales

September 2012 – January 2013 Université Toulouse Capitole I

#### Bachelor of Science in Applied Economics: Business Engineering

2009 – 2012 Ghent University

**Grade:** cum laude (746/1000)

### Employment

#### Assistant Professor in Data Analytics (BOF TT) at Ghent University (100%)

February 2020 – Current

#### Visiting Professor in Business Analytics and Big Data at Université de Namur (5%)

February 2020 – Current

#### Doctor-assistant at KU Leuven (100%)

September 2019 – September 2020

#### Visiting Professor in Social Media and Web Analytics at Ghent University (10%)

January 2019 – September 2020

### Lecturer in Business Analytics at the University of Edinburgh Business School (100%)

September 2018 – September 2019

### Research and teaching assistant at Ghent University (100%)

May 2016 – September 2018

Supervisor Prof. Dr Dirk Van den Poel, co-supervisor: Prof. Dr Michel Ballings

### PhD researcher at Ghent University (100%)

September 2014 – May 2016

Supervisor Prof. Dr Dirk Van den Poel, co-supervisor: Prof. Dr Michel Ballings

## Journal Articles

---

Bogaert, M., Ballings, M., Van den Poel, D., & Oztekin, A. (2021). *Box office sales and social media: A cross-platform comparison of predictive ability and mechanisms*. *Decision Support Systems*, 147, 113517.

Schetgen, L., Bogaert, M., & Van den Poel, D. (2021). *Predicting donation behavior: Acquisition modeling in the nonprofit sector using Facebook data*. *Decision Support Systems* 141, 133446.

Bogaert, M., Ballings, M., Bergmans, R., Van den Poel, D., 2019. *Predicting Self-declared Movie Watching Behaviour Using Facebook Data and Information-fusion Sensitivity Analysis*. *Decision Sciences*. Forthcoming.

Bogaert, M., Lootens, J., Van den Poel, D., Ballings, M., 2019. *Evaluating Multi-label Classifiers and Recommender Systems in the Financial Service Sector*. *European Journal of Operational Research* 279 (2), 620-634.

Bogaert, M. 2018. *Harnessing the Power of Social Media in Predictive Analytics*. Doctoral Dissertation UGent.

Bogaert, M., Ballings, M., Van den Poel, D., 2018. *Evaluating the Importance of Different Communication Types in Romantic Tie Prediction on Social Media*. *Annals of Operations Research* 263, 501-527.

Bogaert, M., Ballings, M., Hosten, M., Van den Poel, D., 2017. *Identifying Soccer Players on Facebook Through Predictive Analytics*. *Decision Analysis* 14 (4), 274 -297.

Bogaert, M., Ballings, M., Van den Poel, D., 2016. *The Added Value of Facebook Friends Data in Event Attendance Prediction*. *Decision Support Systems* 82, 26–34.

Ballings, M., Van den Poel, D., Bogaert, M., 2016. *Social Media Optimization: Identifying an Optimal Strategy for Increasing Network Size on Facebook*. *Omega – International Journal of Management Science, Business Analytics* 59, Part A, 15–25.

## Conference Proceedings

---

Janssens, B., & Bogaert, M. (2021). *Imputation of non-participated race results*. 8th Workshop on Machine Learning and Data Mining for Sports Analytics, ECML/PKDD 2021 Workshop.

## Academic Teaching

---

### Business analytics and big data (course organizer, 3ECTS)

Université de Namur, February 2020 – August 2020

Msc in business engineering: analytics and digital business.

### Social media and web analytics (course organizer, 6ECTS)

Ghent University, February 2020 – September 2020

Msc in business engineering: data analytics and Msc in marketing analysis.

### Principles of Database Management (course organizer, 6ECTS)

KU Leuven, September 2019 – January 2020

Msc in Information Management and electives from Msc in business engineering and bioinformatics

### Social media and web analytics (course organizer, 6ECTS)

Ghent University, February 2019 - March 2019

Msc in business engineering: data analytics and Msc in marketing analysis.

### Data mining (co-lecturer, 8ECTS)

University of Edinburgh, January 2019 – May 2019

Optional course in the Msc in marketing and business analysis.

### Business research methods 1: introduction to data analysis (co-lecturer, 10ECTS)

University of Edinburgh, September 2018-December 2018

Undergraduate course in business studies. I gave the lectures on parametric and non-parametric testing.

### Predictive analytics and modelling of data (course organizer, 7.5ECTS)

University of Edinburgh, September 2018 – December 2018

Msc in business analytics.

### Predictive and prescriptive analytics, advanced predictive analytics (assistant, 6ECTS)

Ghent University, January 2018 – June 2018

Msc in business engineering: data analytics and Msc in marketing analysis.

### Predictive and prescriptive analytics, advanced predictive analytics (assistant, 6ECTS)

Ghent University, January 2017 – June 2017

Msc in business engineering: data analytics and Msc in marketing analysis.

### Predictive and prescriptive analytics, advanced predictive analytics (assistant, 6ECTS)

Ghent University, January 2016 – June 2016

Msc in business engineering: data analytics and Msc in marketing analysis.

### Predictive and prescriptive analytics, advanced predictive analytics (assistant, 6ECTS)

Ghent University, January 2015 – June 2015

Msc in business engineering: data analytics and Msc in marketing analysis.

---

## Professional Teaching

### Postgraduate in Big Data and Analytics (3 sessions)

KU Leuven, November 2020, February 2020, November 2019

Sessions: Text Mining I and II, Social Media Analytics

### KBC ADAM Bootcamp (2 sessions)

KBC Bank NV, 4-5 November 2019

Session 3: Modeling and Evaluation, Session 4: Piloting and Deployment

---

## Conference Presentations\*

\*Only presentations that I presented myself are included.

### Evaluating Multi-label Classifiers and Recommender Systems in the Financial Service Sector.

Matthias Bogaert, Justine Lootens, Dirk Van den Poel, and Michel Ballings.

**30th European Conference on Operation Research** (June 23-26, 2019). **Location:** Dublin, Ireland.

**Session title:** Business Analytics I. **Stream:** Business Analytics.

### Comparing the Ability of Facebook and Twitter to Predict Box Office Sales.

Matthias Bogaert, Michel Ballings, Dirk Van den Poel, and Asil Oztekin.

**29th European Conference on Operation Research** (July 8-11, 2018). **Location:** Valencia, Spain.

**Session title:** Sales Forecasting. **Stream:** Business Analytics.

**Predicting Movie Watching Behaviour Using Facebook Data and Information-fusion Sensitivity Analysis.**

*Matthias Bogaert, Michel Ballings, Rob Bergmans and Dirk Van den Poel.*

**39th ISMS Marketing Science Conference** (June 7-10, 2017). **Location:** Los Angeles, California, USA.

**Session title:** New Product Diffusion: Movies.

**Evaluating the Importance of Different Communication Types in Tie Strength Prediction on Social Media.**

*Matthias Bogaert, Michel Ballings and Dirk Van den Poel.*

**INFORMS annual meeting** (November 13-16 2016). **Location:** Nashville, Tennessee, USA.

**Session title:** Business applications in social media analytics. **Cluster:** Social Media Analytics.

**Predicting Buyer Behaviour Using Social Media Data.**

*Matthias Bogaert, Kelly Hewett, Michel Ballings and Dirk Van den Poel.*

**INFORMS annual meeting** (November 1-4 2015). **Location:** Philadelphia, Pennsylvania, USA.

**Session title:** Predicting customer behaviour using Facebook data. **Cluster:** Social Media Analytics

**The Added Value of Facebook Friends Data in Event Attendance Prediction.**

*Matthias Bogaert, Michel Ballings and Dirk Van den Poel.*

**PhD day Ghent University** (May 27 2015). **Location:** Ghent, Belgium.

## Projects

---

**Actelligent (Scotland) Company Limited**

*May 2019 – September 2019*

*In collaboration with Dr. Rafaella Calabrese and Prof. Dr. Jonathan Crook.*

**Flemish government (Flemish Call Center 1700)**

*September 2014 – September 2016*

## PhD students

---

**PhD Supervisor: Shimanto Rahman**

*September 2021 – Present*

*Title: Applications of Data Analytics in B2B Marketing*

**PhD Supervisor: Lisa Schetgen**

*April 2019 – Present*

*Title: Essays on Predictive and Prescriptive Analytics*

**PhD Supervisor: Bram Janssens**

*September 2018 – Present*

*Title: Essays on Big Data Analytics*

**Doctoral Advisory Committee: Rafael Van Belle**

*September 2018 – Present*

*Title: Scalable Node Representation Learning in Customer Networks (SCOREPLUS): New Techniques and Applications*

## Awards

---

**Teaching Awards 19: Nominated for the Best Assessment Feedback**

*April 2019*

*Nominated by the students for most insightful feedback.*

### **Runner-up INFORMS Social Media Analytics Best Student Paper Award**

November 2016

*Paper: Evaluating the Importance of Different Communication Types in Romantic Tie Prediction on Social Media*

### **SAP Belux Big Data prize**

September 2015

*Prize for the best marketing engineering student over the two master years*

## **Grants**

---

### **The Data Lab Research Project Grant (£ 19,932.34)**

April 2019

*Funding for a research project with Actelligent about Sentiment Analysis (together with Dr. Raffaella Calabrese and Prof. Dr. Jonathan Crook)*

### **Grant for participation in a conference abroad (FWO) + grant for participation in a conference (FEB UGent) (€600)**

May 2018

*Matthias Bogaert, Michel Ballings, Dirk Van den Poel, Asil Oztekin. Comparing the Ability of Facebook and Twitter in Predicting Box Office Sales. 29th European Conference on Operational Research (Valencia, SP).*

### **Grant for participation in a conference abroad (FWO) + grant for participation in a conference (FEB UGent) (€750)**

June 2017

*Matthias Bogaert, Michel Ballings, Rob Bergmans and Dirk Van den Poel. Predicting Movie Watching Behaviour Using Facebook Data and Information-fusion Sensitivity Analysis. 39th ISMS Marketing Science Conference (Los Angeles, California, USA).*

### **Grant for participation in a conference (FEB UGent) (€750)**

November 2015

*Matthias Bogaert, Kelly Hewett, Michel Ballings and Dirk Van den Poel. Predicting Buyer Behaviour Using Social Media Data. INFORMS annual meeting 2015 (Philadelphia, Pennsylvania, USA).*

## **Refereeing (ad hoc)**

---

### **Annals of Operations Research**

2020 - Present

### **European Journal of Operational Research**

2018 – Present

### **Journal of Interactive Marketing**

2018 - Present

### **Decision Support Systems**

2016 – Present

## **Service**

---

### **Commission Scientific Research, Faculty of Economics and Business Administration, Ghent University**

September 2020 – Present

### Follow-up Scientific council Alpha-group, Ghent University

September 2020 – September 2021

### Secretary Commission of Master of Data Science for Business

December 2019 – Present

### Course Designer Distance Learning at Scale Micromasters

January 2019 – September 2019

Designing a course module (linear regressions) in the online Micromasters in Predictive Analytics

## Software

---

### R-package DecorateR: Fit and Deploy DECORATE Trees.

Matthias Bogaert (2017).

### R-package AggregateR: Aggregate numeric, date and categorical variables by an ID.

Matthias Bogaert, Michel Ballings and Dirk Van den Poel (2015).

## IT skills

---

### Advanced knowledge:

- R
- Python
- SQL
- MS Office
- Latex

### Intermediate knowledge:

- SPSS
- SAS

### Basic knowledge:

- Matlab
- Java
- Eviews

## Languages

---

	Spoken	Written
Dutch	Mother tongue	Mother tongue
English <sup>a</sup>	***	***
French	**	**
German	*	*

<sup>a</sup>Holder of ITACE certificate for CEFR C1-level of Academic English