

## Maria OLMEDILLA FERNANDEZ

### Associate Professor

Academy: Digitalization

Research center: SKEMA Centre for Artificial Intelligence

Campus: PARIS

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## Research interests

eWOM communities, Machine learning techniques, Online user behaviour, Text mining, NLP, Artificial Intelligence

# Teaching interests

Artificial Itelligence, Business Intelligence, Data Analytics

## Education

2017 Ph.D. in Strategic Management and International Business, University of Seville, Spain

2014 MSc in Technology and Innovation Management, Brandenburg University of Technology Cottbus-

Senftenberg (BTU), Germany

# Experience

#### **Full-time academic positions**

Since 2019 Associate Professor, SKEMA Business School, France

2017 - 2019 Assistant Professor, École de management Léonard de Vinci, France

### Other academic affiliations and appointments

Since 2023 Academic Director, SKEMA Business School, France

2014 - 2017 PhD Researcher, University of Seville, Spain

#### **Other professional experiences**

2012 - 2015 Freelancer consultant, GRUPO AMETS GESTIÓN I+D+i, Spain

# Research grants, Awards and Honors

## **Awards and Honors**

2022 Jury's Special Award for Pedagogical Innovation, SKEMA Business School, France

2020 Excelent Oral Presentation, 4th International Conference on Information System and Data Mining,

United States of America

2019 Extraordinary Doctorate Award, University of Seville

#### **Research Grants**

2022 Horizon 2020 - HPC-Europa3 Transnational Access Programme, CSC Finland, Finland

## **Publications**

## **Peer-reviewed journal articles**

OLMEDILLA FERNANDEZ, M., ROCÍO MARTÍNEZ-TORRES, M. and TORAL, S. (2022). Prediction and modelling online reviews helpfulness using 1D Convolutional Neural Networks. *Expert Systems with Applications*, 198, pp. 116787.

OLMEDILLA FERNANDEZ, M., MARTINEZ-TORRES, R. and TORAL, S. (2019). The super-hit effect and the long tail phenomenon in the context of electronic Word-of-Mouth. *Decision Support Systems*, 125, pp. 113120.

OLMEDILLA FERNANDEZ, M., SEND, H. and TORAL, S.L. (2019). Identification of the unique attributes and topics within Smart Things Open Innovation Communities. *Technological Forecasting and Social Change*, 146, pp. 133-147.

TESO, E., OLMEDILLA FERNANDEZ, M., MARTINEZ-TORRES, M.R. and TORAL, S.L. (2018). Application of text mining techniques to the analysis of discourse in eWOM communications from a gender perspective. *Technological Forecasting and Social Change*, 129, pp. 131-142.

ARENAS-MARQUEZ, F.J., MARTINEZ-TORRES, M.R., OLMEDILLA FERNANDEZ, M. and TORAL, S.L. (2018). Identifying the Features of Reputable Users in eWOM Communities by Using Particle Swarm Optimization. *Technological Forecasting and Social Change*, 133, pp. 220-228.

OLMEDILLA FERNANDEZ, M., MARTINEZ-TORRES, M.R. and TORAL, S.L. (2016). Examining the power-law distribution among eWOM communities: A characterization approach of the long tail. *Technology Analysis and Strategic Management*, 28(5), pp. 601-613.

OLMEDILLA FERNANDEZ, M., MARTINEZ-TORRES, M.R. and TORAL, S.L. (2016). Harvesting Big Data in social science: A methodological approach for collecting online user-generated content. *Computer Standards & Interfaces*, pp. 79-87.

MARTINEZ-TORRES, R. and OLMEDILLA FERNANDEZ, M. (2016). Identification of innovation solvers in open innovation communities using swarm intelligence. *Technological Forecasting and Social Change*, 109, pp. 15-24.

## **Conference proceedings**

OLMEDILLA FERNANDEZ, M., ROMERO MORENO, J.C. and BENAVENT, C. (2023). A BERT model approach on a large online reviews dataset: The role of context in evaluation.

OLMEDILLA FERNANDEZ, M., LI, Z., ESPINOSA-LEAL, L., LENDASSE, A. and BÖRK, K.M. (2022). Does streaming affects video game popularity?

OLMEDILLA FERNANDEZ, M., ROMERO, J.C., MARTÍNEZ TORRES, R. and TORAL, S. (2022). Applying NLP techniques to characterize what makes an online review trustworthy. *Editorial Universitat Politècnica de València*, pp. 189-195.

OLMEDILLA FERNANDEZ, M., ARENAS-MARQUEZ, F.J., MARTINEZ-TORRES, M.R. and TORAL, S. (2016). Features of Reputed Users in eWOM Using Evolutionary Computation.

OLMEDILLA FERNANDEZ, M., ARENAS-MARQUEZ, F.J., MARTINEZ-TORRES, M.R. and TORAL, S. (2016). Identification of Influencers in eWord-of-Mouth communities using their Online Participation Features.

OLMEDILLA FERNANDEZ, M., MARTINEZ-TORRES, M.R. and TORAL, S. (2015). Examining Gender Discourse Differences in Shared Reviews about Books in eWOM.

MARTANEZ-TORRES, M.R., TORAL, S. and OLMEDILLA FERNANDEZ, M. (2015). A quantitative study of the evolution of Open Source Software Communities.

OLMEDILLA FERNANDEZ, M., MARTINEZ-TORRES, M.R. and TORAL, S. (2015). A long tail study of eWOM communities.

## **Conference presentations**

OLMEDILLA FERNANDEZ, M., ROMERO MORENO, J.C., MARTÍNEZ TORRES, R. and TORAL, S. (2023). Applying Transformers-based NLP Models to Explore Credibility in Different Product Categories in Amazon's online reviews. In: CARMA2023-The 5th International Conference on Advanced Research Methods and Analytics. Seville.

OLMEDILLA FERNANDEZ, M., LI, Z. and ESPINOSA-LEAL, L. (2023). Predicting the helpfulness score of videogames of the STEAM platform. In: CARMA2023-The 5th International Conference on Advanced Research Methods and Analytics. Seville.

OLMEDILLA FERNANDEZ, M., LI, Z., ESPINOSA-LEAL, L., LENDASSE, A. and BÖRK, K.M. (2022). Does streaming affects video game popularity? In: The 12th International Conference on Extreme Learning Machines, ELM2022.

OLMEDILLA FERNANDEZ, M., ROMERO, J.C., MARTÍNEZ-TORRES, R. and TORAL, S. (2022). Applying NLP techniques to characterize what makes an online review trustworthy. In: 4th International Conference on Advanced Research Methods and Analytics (CARMA 2022). Valencia.

OLMEDILLA FERNANDEZ, M., HAIKEL-ELSABEH, M. and ROMERO, J.C. (2022). A hybrid recommender system combining online review helpfulness and review positive sentiment to increase prediction accuracy. In: 6th International Conference on Information System and Data Mining, ICISDM2022. Silicon Valley.

OLMEDILLA FERNANDEZ, M. (2022). Fundamentals of Artificial Intelligence and Machine Learning: Practical Business Applications. In: Cycle of Research Seminars Master and PhD Programme in Strategic Management and International Business Faculty of Economics and Business Administration University of Seville. Seville.

OLMEDILLA FERNANDEZ, M. (2022). Understanding Artificial Intelligence: An overview of the basics and its applications. In: Graduate School and Research Unit, Arcada University of Applied Sciences, Helsinki.

OLMEDILLA FERNANDEZ, M., MARTINEZ-TORRES, M.R. and TORAL, S. (2020). Identification of online reviews helpfulness using Neural Networks. In: CARMA2020, 3rd International Conference on Advanced Research Methods and Analytics. Valencia.

OLMEDILLA FERNANDEZ, M., HAIKEL-ELSABEH, M. and DE SMEDT, J. (2020). Recommending products based on users' positive word-of-mouth by combining a word-embedding model, Kernel Principal Component Analysis and SVD++ Collaborative Filtering. In: ICISDM2020 - 4th International Conference on Information System and Data Mining. Hilo.

TORAL, S., MARTINEZ-TORRES, M.R. and OLMEDILLA FERNANDEZ, M. (2019). Analysis of Online Reviews from the perspective of Search and Experience goods. In: International Conference on Social Informatics. Saint Petersburg.

OLMEDILLA FERNANDEZ, M. (2019). Recommending products based on users' activities and interests within an eWOM community by combining Principal Component Analysis and ALS Collaborative Filtering. In: ICISDM - International Conference on Information System and Data Mining. Houston.

OLMEDILLA FERNANDEZ, M. (2018). Improving postgraduate students' learning with the use of gamification Apps: The case of Kahoot! In: I International Workshop. Educational Innovation and Research. Sevilla.

OLMEDILLA FERNANDEZ, M., MARTINEZ-TORRES, M.R. and TORAL, S. (2018). Identification of helpful and not helpful online reviews within an eWOM community using text-mining techniques. In: International Conference on Advanced Research Methods and Analytics. Valencia.

#### Press and social media

OLMEDILLA FERNANDEZ, M. and FAURE, C. (2022). Podcast series #2 - when a development course turns into a hackathon. SKEMA ThinkForward.

OLMEDILLA FERNANDEZ, M. (2021). How I turned my non-technical students into data analyst heroes thanks to no-code AI tools. SKEMA ThinkForward.

# Other research activities

### **Reviewer for:**

Decision Support Systems, IEEE Access, Expert Systems with Applications, Expert Systems with Applications, Technological Forecasting and Social Change, Decision Support Systems, Sustainability, Technological Forecasting and Social Change

## **Affiliations**

Since 2023 Association Française du Marketing, France

## **Other academic activities**

Since 2022	Steering Committee CARMA, Polytechnic University of Valencia, Spain
2022 - 2023	Technical Committee ICISDM2023, United States of America
2022 - 2023	