

**MARIE SKŁODOWSKA-CURIE POSTDOCTORAL FELLOWSHIPS 2025**  
**EXPRESSION OF INTEREST FOR HOSTING MARIE CURIE FELLOWS**

**HOST INSTITUTION**

NOVA Information Management School (NOVA IMS)

**RESEARCH GROUP AND URL**

MagIC research centre: <https://magic.novaims.unl.pt/>

NOVA Tourism & Hospitality Analytics Lab: <https://www.novaims.unl.pt/en/nova-ims/labs/nova-tourism-hospitality-analytics-lab/>

**SUPERVISOR (NAME AND E-MAIL)**

Nuno António (nantonio@novaims.unl.pt)

**SHORT CV OF THE SUPERVISOR**

Nuno António is a distinguished researcher and academic with extensive experience in computer science, data science, and their applications in various fields such as hospitality, tourism, retail, and healthcare.

Holding a PhD in Information Science and Technology from ISCTE-IUL, Nuno has dedicated his career to advancing the understanding and practical application of data science and machine learning. His academic journey is complemented by a Master's degree in Hotel Administration and Management from the University of Algarve and a degree in Software Engineering from ISMAT.

As Chief Technology Officer at ITBASE, he has led the development of innovative software solutions and decision support systems, significantly impacting the hospitality and retail sectors. In addition to his industry contributions, Nuno is an Assistant Professor at Nova IMS, where he teaches courses in machine learning, big data, data mining, and social media analytics.

His research has been widely published in top-tier journals and conferences, reflecting his commitment to advancing knowledge and technology in his fields of expertise. Nuno's work is recognized with multiple awards, including the Best Paper Award at the Tourism and Hospitality Networking Conference, Cornell Hospitality Quarterly journal, and the ISCTE-IUL Scientific Award.

**5 SELECTED PUBLICATIONS**

- Vorobeveva, D., Costa Pinto, D., António, N., & Mattila, A. S. (2023). The augmentation effect of artificial intelligence: can AI framing shape customer acceptance of AI-based services? *Current Issues in Tourism*, 27(10), 1551–1571. <https://doi.org/10.1080/13683500.2023.2214353>
- Phillips, P., Antonio, N., de Almeida, A., & Nunes, L. (2020). The Influence of Geographic and Psychic Distance on Online Hotel Ratings. *Journal of Travel Research*, 59(4), 722–741. <https://doi.org/10.1177/0047287519858400>
- Antonio, N., de Almeida, A., & Nunes, L. (2019). Big Data in Hotel Revenue Management: Exploring Cancellation Drivers to Gain Insights Into Booking Cancellation Behavior. *Cornell Hospitality Quarterly*, 60(4), 298–319. <https://doi.org/10.1177/1938965519851466>
- Antonio, N., de Almeida, A., Nunes, L. et al. (2018). Hotel online reviews: different languages, different opinions. *Information Technology and Tourism* 18, 157–185. <https://doi.org/10.1007/s40558-018-0107-x>
- Antonio, N., de Almeida, A., Nunes, L. et al. (2018). Hotel online reviews: different languages, different opinions. *Information Technology and Tourism* 18, 157–185. <https://doi.org/10.1007/s40558-018-0107-x>

## PROJECT TITLE AND SHORT DESCRIPTION

### **INTEGRATE-TH — Integrated Data-Driven Tourism and Hospitality Intelligence Platform**

INTEGRATE-TH project will design and validate an AI-driven analytics platform capable of turning heterogeneous data streams into actionable intelligence for destinations and hospitality firms. Building on recent work at NOVA IMS in automated tourism market intelligence, sentiment-sensitivity modelling, hotel demand forecasting and revenue-management simulation, the project will connect the dots between what is happening in source markets, how travelers and residents feel, and how pricing and inventory decisions should adapt. News data and regulatory updates will be classified with models to flag trends and patterns, while millions of online reviews will be mined with large-language-model pipelines to quantify reputation shifts and identify origin markets that are most responsive to them. Fine-grained booking, pricing and occupancy feeds from Online Travel Agencies and other sources will feed forecasting models to anticipate hotel and destination demand. These signals will converge in a digital twin of the revenue-management cycle, allowing managers and policy makers to experiment virtually with channel mixes, dynamic price ladders and sustainability constraints before committing them in the real world. Built with reproducible, open-science tooling and evaluated in partnership with tourism and hospitality organization, including Destination Management Organizations, INTEGRATE-TH will demonstrate how data science can raise forecast accuracy, boost revenue resilience and accelerate the transition toward guest-centric, sustainable tourism.

## SCIENTIFIC AREA WHERE THE PROJECT FITS BEST\*

Social Sciences and Humanities (SOC), Information Science and Engineering (ENG)