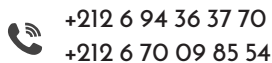




## Zouhair ELAMRANI ABOU ELASSAD

### University Professor - Data Scientist



#### > PROFILE

Zouhair Elamrani Abou El Assad is a university professor within the department of computer science at the National School of Applied Sciences of Safi (ENSA Safi, Cadi Ayyad University, Morocco). He holds a PhD degree in computer sciences on his work on Artificial Intelligence and Intelligent Transportation Systems.

Zouhair has been a project manager in charge of a variety of IT projects with special emphasis on Artificial Intelligence-based applications. He has pioneered and launched independent research projects; and has established a solid linkage with both public and industry sectors. His main research interests include, but are not limited to, Artificial Intelligence, Machine Learning, Intelligent Environments, IoT and Data Science-related subjects.

He is the author of many international publications and acts as a reviewer of different international journals and conferences.

#### > CAREER SUMMARY

- 2021 - Ongoing ○ University Professor - National School of Applied Sciences, Cadi Ayyad University | Safi - Morocco
- 2018 - 2021 ○ Ph.D. in Data Science at the Cadi ayyad University, Marrakesh | Supervision: Prof. Hajar Mousannif  
Thesis Subject : [Real-time Road Crash Prediction Through AI-based Driving Behavior Analysis](#)
- 2016 - 2021 ○ IT Engineer at the Cadi Ayyad University | Marrakesh - Morocco
- 2014 - 2016 ○ Junior Project Manager at "The House Of Geeks" | Startup at Agadir - Morocco
- 2014 ○ National School of Applied Sciences of Marrakech -- IT Engineer | State Engineer

#### > SCIENTIFIC PUBLICATIONS

- Zouhair Elamrani Abou El Assad, Mohammed Ameksa, Dauha Elamrani Abou El Assad, Hajar Mousannif, (2023). "Efficient Fusion Decision System for Predicting Road Crash Events: A Comparative Simulator Study for Imbalance Class Handling". [Transportation Research Record Journal](#). DOI: <https://doi.org/10.1177/03611981231192985> - **TR Impact Factor: 1.9.**
- Zouhair Elamrani Abou El Assad, Mohammed Ameksa, Dauha Elamrani Abou El Assad, Hajar Mousannif, (2023). "Machine Learning Prediction of Weather-Induced Road Crash Events for Experienced and Novice Drivers: Insights from a Driving Simulator Study". Proceedings of the [8th International Conference on Business Intelligence, Istanbul, Turkey](#). DOI: [https://doi.org/10.1007/978-3-031-37872-0\\_5](https://doi.org/10.1007/978-3-031-37872-0_5).
- Soukaina EL FEROUALI, Zouhair Elamrani Abou El Assad, Abdelmounaïm ABDALI, (2023). "Does gender affect the identification of road crash occurrences? An Overview and a comparative study". [International Journal of Computer Engineering and Data Science](#). DOI: <https://www.ijceds.com/ijceds/article/view/58>.
- Mohammed Ameksa, Hajar Mousannif, Hassan Al Moatassime, Zouhair Elamrani Abou El Assad, (2022). "Crash Prediction using Ensemble Methods". Proceedings of the [2nd International Conference on Big Data, Modelling and Machine Learning BML - Kenitra, Morocco](#). DOI: <https://doi.org/10.5220/0010731200003101>.
- Mohammed Ameksa, Hajar Mousannif, Hassan Al Moatassime, Zouhair Elamrani Abou El Assad, (2020). "Toward Flexible Data Collection of Driving Behaviour". Proceedings of the [The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Turkey](#). DOI: <https://doi.org/10.5194/isprs-archives-XLIV-4-W3-2020-33-2020>.
- Zouhair Elamrani Abou El Assad, Hajar Mousannif, Hassan Al Moatassime, (2020). "A real-time crash prediction fusion framework: An imbalance-aware strategy for collision avoidance systems". [Transportation Research Part C: Emerging Technologies \(TRC\)](#). Vol 118. DOI: <https://doi.org/10.1016/j.trc.2020.102708> - **TR Impact Factor: 8.3.**
- Zouhair Elamrani Abou El Assad, Hajar Mousannif, Hassan Al Moatassime, (2020). "A proactive decision support system for predicting traffic crash events: A critical analysis of imbalanced class distribution". [Knowledge-Based Systems \(KNOSYS\)](#). Vol 205. DOI: <https://doi.org/10.1016/j.knosys.2020.106314> - **TR Impact Factor: 8.8.**

Zouhair Elamrani Abou El Assad, Hajar Mousannif, Hassan Al Moatassime, (2020). "The application of machine learning techniques for driving behavior analysis: A conceptual framework and a systematic literature review". *Engineering Applications of Artificial Intelligence (EAAI)*. Vol 87. DOI: <https://doi.org/10.1016/j.engappai.2019.103312> - **TR Impact Factor: 8.**

Zouhair Elamrani Abou El Assad, Hajar Mousannif, Hassan Al Moatassime, (2020). "Class-imbalanced crash prediction based on real-time traffic and weather data: A driving simulator study". *Traffic Injury Prevention (TIP)*. Vol 21. DOI: <https://doi.org/10.1080/15389588.2020.1723794> - **TR Impact Factor: 2.2.**

Zouhair Elamrani Abou El Assad, Hajar Mousannif, Hassan Al Moatassime (2020). "Towards Analyzing Crash Events for Novice Drivers under Reduced-Visibility Settings: A Simulator Study", in: *Proceedings of the 3rd International Conference on Networking, Information Systems & Security (NISS2020)*. ACM, Marrakech. DOI: <https://doi.org/10.1145/3386723.3387849>

Mohammed Ameksa, Hajar Mousannif, Hassan Al Moatassime and Zouhair Elamrani Abou El Assad, (2020). "Toward Flexible Data Collection of Driving Behaviour". *The 5th International Conference on Smart City Applications*, Turkey, pp 33-43. DOI: <https://doi.org/10.5194/isprs-archives-XLIV-4-W3-2020-33-2020>.

Zouhair Elamrani Abou El Assad and Hajar Mousannif (2018), "Understanding driving behavior: measurement, modeling and analysis", in *Proceeding of Advanced Intelligent Systems for Sustainable Development (AI2SD2018)*, Tangier, Springer. DOI: [https://doi.org/10.1007/978-3-030-11928-7\\_4](https://doi.org/10.1007/978-3-030-11928-7_4)

## > REVIEWER IN

Analytic Methods in Accident Research (*Elsevier*)

IEEE Internet of Things (*IEEE*)

Artificial Intelligence Review (*Springer*)

Journal of Ambient Intelligence and Humanized Computing (*Springer*)

Expert Systems with Applications (*Elsevier*)

Engineering Applications of Artificial Intelligence (*Elsevier*)

Journal of Supercomputing (*Springer*)

International Journal of Ad Hoc and Ubiquitous Computing (*InderScience*)

Journal of King Saud University - Computer and Information Sciences (*Elsevier*)

International Journal of Pavement Research and Technology (*Springer*)

Transportation Safety and Environment (*Oxford Academic*)

## > PEDAGOGY & TEACHING

2021 - Ongoing: National School of Applied Sciences of Safi, Cadi Ayyad University, Morocco

Modules taught: *Mahine Learning - Deep Learning - Big Data - Data Mining - R Programming - Python Programming - Database & Information systems - Java Programming - Advanced Java Programming*

2018 - 2021 : Faculty of Sciences & Technology, Cadi Ayyad University, Marrakesh, Morocco

Modules taught: *Mahine Learning - Deep Learning*

2018 - 2021 : Faculty of Sciences & Technology, Cadi Ayyad University, Marrakesh, Morocco

Modules taught: *Web development (HTML, CSS, JavaScript, PHP, MySQL) - ReactJS*

2019-2021 : Faculty of Sciences & Technology, Hassan First University, Settat, Morocco

Modules taught: *Web development (HTML, CSS, JavaScript, PHP, MySQL) - ReactJS*

In 2019, Guest for a research stay at Riga Technical University (RTU) Riga, Latvia

## > CERTIFICATES & AWARDS

2020/2021 : Elsevier Recognized reviewer

2019 : Finalist of the 14th edition of the national competition for innovation, research-development and technology

## > RESEARCH PROJECTS & GRANTS

- The Application of Artificial Intelligence in Agriculture: The making of the first 100% Moroccan intelligent robot "AL-KHAWARIZMI PROGRAM GRANT
- Enhancing Road safety with Big Data and Intelligent cooperative systems": Ministry of transportation CADI AYYAD UNIVERSITY - CNRST GRANT

## > OUTREACH AND COMMUNICATIONS ACTIVITIES

- Scientific Committee Member of "The 10th International Conference on Wireless Networks and Mobile Communications 2023", Istanbul, Turkey.
- Scientific Committee Member of "The 7th International Symposium on Intercloud and IoT", Rome, Italie (2021).
- Scientific Committee Member of "The Makerspace Workshop on Distributed and High Performance Computing and Robotics", Marrakech, Maroc (2020).
- Scientific Committee Member of "The International Conference on Decision Aid Sciences and Applications (DASA 2020)", Zallaq, Bahreïn.

## > LANGUAGES

Arabic : Mother Tongue | English : Read, Spoken, Written  
French : Read, Spoken, Written | Spanish : Good Knowledge

## > HOBBIES



Handwritten signature of Zouhair Elamrani Abou Elasad in blue ink.

Zouhair Elamrani Abou Elasad