Curriculum Vitae

Maria Rella Riccardi

Naples, December 31, 2023

Kanglesson read

Maria Rella Riccardi

PhD in Civil System Engineering, P. Eng. University of Naples Federico II, Naples

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Role

SEP 2023 Assistant Professor

Highway Design and Road Safety University of Naples Federico II

Education

OCT 2023 Traffic Safety Researcher's course

Held by proff. S. Daniels, A. Brorsos, A. Laureshyn, S. D. Cafiso, M. Sucha, and A.

Huemer

Organized by International Co-operation on Traffic Concepts and Theories (ICTCT)

Nov 2018 – JAN 2022 PhD in Civil System Engineering

University of Naples Federico II

Research focus: Econometric methods and machine learning algorithms to investigate

factors contributing to pedestrian crash severity.

Evaluation: Excellent

OCT 2021 – MAR 2022 Highway Safety Analytics and Modeling course

Held by professors D. Lord, X. Qin, and S.R. Geedipally

Organized by the Joint International Research Laboratory of Transportation Safety (Tongji University), the China Journal of Highway and Transport, and Shanghai

Institute of Traffic Engineering.

APR – JUN 2021 Transport research tools and methods course

Held by professors T. Koglin, A. Laureshyn, C. D'Agostino, and F. Mauriello

Lund University, Lund (Sweden)

SEPT 2020 English Course

CAE Certificate in English (Cambridge English Course)

Level: C1 - Advanced

SEPT 2018 Master's degree in Hydraulic and Transport Engineering

University of Naples Federico II Evaluation: 110 cum laude/110

Thesis: Analysis of Powered Two-Wheeler Crashes in Spain by Data Mining Techniques

JULY 2015 Bachelor's degree in civil engineering

University of Naples Federico II

Thesis: Road Safety Analysis in Urban area

SEPT 2005 – JUNE 2010 High Scientific School diploma

Evaluation: 100 cum laude/100

National and international awards

BEST PRESENTATION AWARD

The poster presentation "Mixed logit model to investigate cyclists crash severity" has been awarded as the best best poster presentation selected by the public attending the 35th ICTCT Conference "Challenges actual opportunities offered by new technologies to improve traffic safety" held in Catania on 26-27 October 2023.

ASIA'S OUTSTANDING RESEARCHER AWARD

The paper "A data mining approach to investigate patterns of powered two-wheeler crashes in Spain", published on Accident Analysis and Severity, received the recognition for the research produced by the committee "Asia Research Awards", in collaboration with the "Times of Research and the World Research Council".

FINALIST AT THE IEEE ITS SOCIETY - ITALIAN CHAPTER The PhD thesis was selected among the best 3 PhD theses on the topic of Intelligent Transport Systems on the second edition of the PhD Dissertation Award of the Italian Chapter of IEEE ITS SOCIETY.

FINALIST AT THE
LECTERN/POSTER SESSION
"DOCTORAL STUDENT
RESEARCH IN
TRANSPORTATION SAFETY"

The PhD thesis was selected among the best 12 doctoral theses on transport safety at the Lectern/Poster Session 1246 of the 101st TRB Annual Meeting (Washington D.C.) dedicated to the topic "Doctoral Student Research in Transportation Safety".

DEGREE AWARD
"ENG. MARCO SENESE"

Conferred by the Order of Engineers of the Province of Naples to the memory of the Eng. Marco Senese, for the best degree thesis concerning innovative ideas and projects for technological development and for improving the quality of life.

DEGREE AWARD
"RESI-LAB PROJECT"

Funded by the Italian Ministry of Education (MIUR) in favour of DICEA (Department of Civil, Architectural and Environmental Engineering of the University of Naples Federico II) for the research quality produced.

DEGREE AWARD
"DAVIDE NATALE INNOVATIVE SOLUTIONS FOR
SUSTAINABLE MOBILITY"

For the best master's degree thesis documenting relevant scientific and technological developments in the sustainable mobility sector funded by University of Naples Federico II, the National Research Council and IW Bank Private Investments (UBI Banca Group).

Latest research activities

SINCE 2022

Research project I4Driving Integrated 4D driver modelling under uncertainty, HORIZON-CL5-2022-D6-01-03: Human behavioural models. My research task is mapping human factors into driving performances through driving simulation.

SINCE 2021

Research project TALETE, Road Security System for Vulnerable Road Users and Collision Route, POR CAMPANIA FESR 2014 - 2020, sponsored by the European Union and the Italian Ministry of sustainable infrastructures and mobility. The aim of this project is to create and then test a wearable device for vulnerable road users to improve their safety and the safety of vehicle-pedestrian interactions.

International research group member

SINCE 2023 Member of the Standing Committee "Transportation Safety Management Systems -

ACS10" of the Transportation Research Board, National Academies of Sciences, Engineering, and Medicine. "Membership on a TRB standing committee is a high honor. As a member, you have been recognized as an expert in your field", source:

https://onlinepubs.trb.org/onlinepubs/dva/memberguide.pdf.

SINCE 2021 Panel member of the Behavioral Traffic Safety Cooperative Research Program

(BTSCRP) BTS Project 20 "Strategies to Address Misreporting of Impaired and Distracted Driving in Motor Vehicle Crashes".

National research group member

SINCE 2021

Member of the Road Safety Laboratory at University of Naples Federico II chaired by Prof. Eng. Alfonso Montella. The laboratory is member of the Joint International Research Laboratory of Transportation Safety together with: Tongji University, University of Washington, University of Central Florida, Purdue University, Virginia Tech Transportation Institute, University of Iowa, Columbia University, Loughborough University, German Aerospace Center (DLR), Technical University Darmstadt, University of Applied Sciences Darmstadt, University of Tokyo, Texas A&M University, Università di Catania, Bar-llan University, and National Technical University of Athens. https://www.dicea.unina.it/?page_id=1869

Personal Scientific Production

- Synthesis Report on Safety-Related Papers that will be presented at 103rd TRB Annual Meeting, 2024. Prepared by Alfonso Montella, Mohamed Abdel-Aty, Vamsi Krishna Bandaru, Mohamad Banihashemi, Stefano Coropulis, Joy Davis, Nicholas Fiorentini, Simone Fucito, Francesco Galante, Frank Gross, Md Rakibul Islam, Jaeyoung Lee, Filomena Mauriello, Massimo Losa, Anurag Pande, Vittorio Ranieri, Maria Rella Riccardi, Heesub Rim, Mario Romero, Antonella Scarano, Jiayu Yang, and Samgyu Yang. TRB Standing Committees: ACS10 Transportation Safety Management Systems and ACS20 Safety Performance Analysis. https://sites.google.com/site/trbanb20/meetings.
- Montella, A, Calvi, A., D'Amico, F., Ferrante, C., Galante, F., Mauriello, F., Rella Riccardi, M., Scarano, A., 2023. A methodology for setting credible speed limits based on numerical analyses and driving simulator experiments. Transportation Research Part F, 100, 289-307. https://doi.org/10.1016/j.trf.2023.12.008.
- Scarano, A., Aria, M., Mauriello, F., Rella Riccardi, M., Montella, A., 2023. Systematic literature review of 10 years of cyclist safety research. Accident Analysis and Prevention, 184, 106996. https://doi.org/10.1016/j.aap.2023.106996.
- Synthesis Report on Safety-Related Papers presented at 102nd TRB Annual Meeting, 2023. Prepared by Alfonso Montella, Mohamed Abdel-Aty, Vamsi Krishna Bandaru, Mohamad Banihashemi, Stefano Coropulis, Francesco Galante, Roberta Gentile, Frank Gross, Paolo Intini, Md Rakibul Islam, Jaeyoung Lee, Nada Mahmoud, Filomena Mauriello, Anurag Pande, Vittorio Ranieri, Maria Rella Riccardi, Mario Romero, Brendan Russo, Antonella Scarano, Andrew Tarko, and Samgyu Yang. TRB Standing Committees: ACS10 Transportation Safety Management Systems and ACS20 Safety Performance Analysis. https://sites.google.com/site/trbanb20/meetings.

- Miele, P., Di Martino, G., Rella Riccardi, M., Montella, A., Di Martire, D., 2023. A New Tool for Road Network Deformations Monitoring Through Space-Born SAR Data and In-Situ Instruments. Lecture Notes in Civil Engineering 254 LNCE, 359-368. https://doi.org/10.1007/978-3-031-07258-1 37.
- Rella Riccardi, M., Galante, F., Scarano, A., Montella, A., 2022. Econometric and Machine Learning Methods to Identify Pedestrian Crash Patterns. Sustainability, 14(22), 15471. https://doi.org/10.3390/su142215471.
- Montella, A., Chiaradonna, S., Claudi de Saint Mihiel, A., Lovegrove, G., Nunziante, P., Rella Riccardi, M., 2022. Sustainable Complete Streets Design Criteria and Case Study in Naples, Italy. Sustainability, 14(20), 13142. https://doi.org/10.3390/su142013142.
- Rella Riccardi, M., Augeri, M.G., Galante, F., Mauriello, F., Nicolosi, V., Montella, A., 2022. Safety Index for evaluation of urban roundabouts. Accident Analysis and Prevention, 178, 106858. https://doi.org/10.1016/j.aap.2022.106858.
- Rella Riccardi, M., Mauriello, F., Scarano, A., Montella, A., 2022. Analysis of contributory factors of fatal pedestrian crashes by mixed logit model and association rules. International Journal of Injury Control and Safety Promotion, in press. https://doi.org/10.1080/17457300.2022.2116647.
- Rella Riccardi, M., Mauriello, F., Sarkar, S., Galante, F., Scarano, A., Montella, A., 2022. Parametric and Non-Parametric Analyses for Pedestrian Crash Severity Prediction in Great Britain. Sustainability, 14(6), 3188, https://doi.org/10.3390/su14063188.
- Galante, F., Mauriello, F., Pernetti, M., Rella Riccardi, M., Montella, A., 2022. Effects of Traffic Control Devices on Rural Curve Lateral Position. Transportation Research Record, 2676(1), 162-180. https://doi.org/10.1177/F03611981211034718.
- Montella, A., Mauriello, F., Pernetti, M., Rella Riccardi, M., 2021. Rule discovery to identify patterns contributing to overrepresentation and severity of run-off-the-road crashes. Accident Analysis and Prevention, 155, 106119. https://doi.org/10.1016/j.aap.2021.106119.
- Synthesis Report on Safety-Related Papers presented at 101st TRB Annual Meeting (2022). Prepared by Alfonso Montella, Mohamed Abdel-Aty, Mohamad Banihashemi, Fatima-Zahra Dahak, Frank Gross, Jaeyoung Lee, Nada Mahmoud, Filomena Mauriello, Maria Rella Riccardi, Brendan Russo, Nicolas Saunier, Antonella Scarano, and Raghavan Srinivasan. TRB Standing Committees: ACS10 Transportation Safety Management Systems and ACS20 Safety Performance Analysis, https://sites.google.com/site/trbanb20/meetings.
- Synthesis Report on Safety-Related Papers presented at 100th TRB Annual Meeting (Virtual edition, 2021). Prepared by Preparato da Alfonso Montella, Mohamed Abdel-Aty, Mohamad Banihashemi, Frank Gross, Qiming Guo, Jaeyoung Lee, Filomena Mauriello, Raul Andres Pineda Mendez, Maria Rella Riccardi, Heesub Rim, Brendan Russo, Xueqian Shi, Raghavan Srinivasan, Jinghui Yuan, Andrew Tarko. TRB Standing Committees: ACS10 Transportation Safety Management Systems and ACS20 Safety Performance Analysis. https://sites.google.com/site/trbanb20/meetings.
- Synthesis Report on Safety-Related Papers presented at 99th TRB Annual Meeting (2020). Prepared by Alfonso Montella, Mohamed Abdel-Aty, Mohamad Banihashemi, Qing Cai, Frank Gross, Mohamed Bayoumi Kamel, Bismarck Ledezma-Navarro, Jaeyoung Lee, Filomena Mauriello, Maria Rella Riccardi, Brendan Russo, Nicolas Saunier, Tarek Sayed, Raghavan Srinivasan. TRB Standing Committees: ANB10 Transportation Safety Management; ANB20 Safety Data, Analysis and Evaluation; ANB25 Highway Safety Performance. https://sites.google.com/site/trbanb20/meetings.
- Montella, A., de Oña, R., Mauriello, F., Rella Riccardi, M., Silvestro, G., 2020. A data mining approach
 to investigate patterns of powered two-wheeler crashes in Spain. Accident Analysis and Prevention,
 134, 105251. https://doi.org/10.1016/j.aap.2019.07.027.

Synthesis Report on Safety-Related Papers presented at 98th TRB Annual Meeting (2019). Prepared by Alfonso Montella, Mohamed Abdel-Aty, Mohamad Banihashemi, Frank Gross, Thomas Hall, Jaeyoung Lee, Cristhian Lizarazo, Filomena Mauriello, Raul Pineda-Mendez, Maria Rella Riccardi, Brendan Russo, Raghavan Srinivasan. TRB Standing Committees: ANB10 – Transportation Safety Management; ANB20 – Safety Data, Analysis and Evaluation; ANB25 – Highway Safety Performance. https://sites.google.com/site/trbanb20/meetings.

Guest Editor

SINCE JULY 2022 Sustainable Transportation Systems in Urban Areas: Planning, Operation, and

Management

A Special Issue of Sustainability (ISSN 2071-1050).

https://www.mdpi.com/journal/sustainability/special issues/R40J453257.

Reviewer activities

SINCE 2023 KSCE Journal of Civil Engineering

Journal of Engineering and Applied Science

Safety

SINCE 2022 Canadian Journal of Civil Engineering

International Journal of Environmental Research and Public Health International Journal of Injury Control and Safety Promotion

Behavioral Sciences

Energies Infrastructures Sustainability

SINCE 2021 Journal of Advanced Transportation

SINCE 2019 TRB (Transportation Research Board)

TRR (Journal of the Transportation Research Record)