BIOGRAPHICAL AND CONTACT INFORMATION



Department of Civil, Construction and Environmental Engineering (DICEA)
University of Naples Federico II
School of Polytechnic and Basic Sciences
Via Claudio 21, Naples, Italy, 80125
Phone: (00) 39 081 7683772
LinkedIn Profile: https://it.linkedin.com/in/sa-biancardo
E-mail: salvatoreantonio.biancardo@unina.it

CURRENT POSITION

Associate Professor in Roads, Railways and Airports
Department of Civil, Construction and Environmental Engineering (DICEA)
University of Naples Federico II, Italy
School of Polytechnic and Basic Sciences

Co-Proponent University Spin-Off
"VIASTRATA SRL" for Infrastructure Building Information Management-infraBIM

AIIT Vice-President, Italian Association for Traffic and Transport Engineering - Campania-Molise Section.

EDUCATION

Ph.D. (Doctor Europaeus)
University of Naples Federico II, Italy
Major: Civil Engineering; *Area of Emphasis:* Road Infrastructure and Transportation System
Title: Modeling Highway Geometric Design Consistency using Operating Speed and Safety Data

Visiting Ph.D. Candidate **August 2015 – February 2016**
University of Washington, Seattle (WA), Smart Transportation Applications and Research (STAR) Laboratory, Department of Civil & Environmental Engineering
Supervisor: Prof. Yinhai Wang

Visiting Ph.D. Candidate **May 2015 – July 2015**
University of Coimbra, Portugal, Department of Civil Engineering
Supervisor: Prof. Ana Maria César Bastos Silva

Visiting Ph.D. Candidate **September 2014 – March 2015**
University of Washington, Seattle (WA), Department of Construction Management.
Supervisor: Prof. Giovanni Migliaccio

Master of Science Degree **March 2012**
University of Naples Federico II, Italy
Major: Civil Engineering; *Area of Emphasis:* Civil Transportation Engineering
Title: Relazioni tra funzioni di performance della sicurezza delle strade e dinamica dell'incidente [Relationships between road safety performance functions and crash type]

AWARDS AND RECOGNITIONS

- (2024) **Winner** of the Applied Sciences 2024 Travel Award
- (2023) National Scientific Qualification as **Full Professor** (art.16 of the law 30 December 2010, n.240).
- (2018) National Scientific Qualification as **Associate Professor** (art.16 of the law 30 December 2010, n.240).
- (2022) **Invited Presentation** for *"Modellazione e gestione informativa di pavimentazioni stradali a elementi",* National Workshop "Gestione sostenibile delle pavimentazioni stradali e aeroportuali", Palermo, September 21, 2022.
- (2022) **Invited Presentation** for *"Computational Design for As-Built Modeling of Roman Pavements",* GWCAEE-2022. Global Webinar on Civil, Architectural and Environmental Engineering, On-demand, August 22, 2022.
- (2022) **Invited Presentation** for *"Integrated BIM-based LCA for road asphalt pavements"*, IOCI 2022: The 1st International Online Conference on Infrastructures, On-demand, June 9, 2022.
- (2022) **Invited Presentation** for *"BIM for Roads and Railways: State-of-the-Art Review and Practical Aspects"*), NATO Advanced Training Courses "Monitoring and Protection of Critical Infrastructure by Unmanned Systems", On-demand, June 2, 2022.
- (2022) **Invited Presentation** for *"HBIM approach for historic pavement digitalization and management"*. V-ASET2022 6th Edition of Applied Science, Engineering and Technology Virtual, On-demand, April 22, 2022.
- (2021) **Editor's Choice in recognition** of the outstanding publication "Life Cycle Assessment of Sustainable Asphalt Pavement Solutions Involving Recycled Aggregates and Polymers". Materials, 14(14), 3867. DOI: 10.3390/ma14143867.
- (2021) **Finalist** The buildingSMART Awards 2021, Operational Excellence Category: Asset Management. Project Title: *Asset Information Management of an existing railway infrastructure in the openBIM scenario: the Cancello-Benevento line*. Team member: University of Naples Federico II.
- (2021) **Invited** for the selection of *Editor-in-Chief e Deputy Editor-in-Chief* for Civil Engineering and Architecture (Horizon Research Publishing). Print ISSN: 2332-1091, Online ISSN: 2332-1121.
- (2016) Selected for the Research Position as **Junior Safety Engineer, Research Assistant 2**. University of Connecticut, School of Engineering, Connecticut Transportation Institute, USA.
- (2015) **Top Place Honor** of The Oregon *ITE's 24th Annual Bill Kloos Traffic Bowl*, Portland, Oregon USA. *Team Member: University of Washington.*
- (2015) **Third Place Winner Poster Contest**, *PacTrans Region 10 Student Transportation Conference 2015*, Seattle (WA), USA. *Poster title:* "*Methodology for Evaluating Roadway Geometric Design Consistency by using Speed and Safety Data".*

- (2015) **Selected as speaker** for Workshop Doctoral Student Research in Transportation Operations and Traffic Control, Transportation Research Board (TRB) 95th Annual Meeting, Washington D.C., USA. *Presentation Title: Modeling Highway Consistency using Operating Speed and Safety Data (Presentation Number: P16-2113).*
- (2013) **Invited Presentation** for "*A statistical look at gender and age differences as related to the injury crash type on low-volume roads".* The 5th International Conference on "Safety and Security Engineering" SAFE, Roma, September 17-19, 2013.
- (2012) **Public selection's winner** - Occasional Provision for Geosveva Ltd. Topic: Organization, analysis and processing of data related to low-volume roads".

INTERNATIONAL, NATIONAL, UNIVERSITY SERVICE ACTIVITIES

- **Editorial Board Member**. *Railway Standard Design. ISSN: 1004-2954.* *https://tdbs.publish.founderss.cn/homeNav?lang=en*
- **Advisory Board Member** of the European Union's Horizon 2020 funded project "InfraROB - Maintaining integrity, performance and safety of the road infrastructure through autonomous robotized solutions and modularization".
- **Guest Editor** dello Special Issue "*Smart and Low Carbon Emission-Oriented Maritime Traffic Management and Controlling".* Journal of Marine Science and Engineering (Publisher "MDPI"). ISSN 2077-1312.
- (2023-) **Associate Editor**. Transportation Research Record: Journal of the Transportation Research Board. ISSN: 0361-1981 (Print), ISSN: 2169-4052 (Online). Publisher: SAGE.
- (2023-) **Associate Editor**. Innovative Infrastructure Solutions. Topic 2. Sustainable Civil Infrastructures. ISSN: 2364-4176 (Print), ISSN: 2364-4184 (Online). Publisher: Springer.
- **Scientific Committee Member** of The 12th International Conference "Environmental Engineering", Vilnius, 27-28 April, 2023.
- (2022) **Selection and Evaluation Board Member** for the Ph.D. Candidates research prize award competition of the *Mediterranean PhD School 3rd Edition "From sustainable to regenerative and resilient design"*, Naples, Italy, 10-15 October, 2022.
- **Editor** Sustainable Pavements and Road Materials: Proceedings of the 7th SIIV Arena, Naples, Italy, 9 September, 2022. FedOA - Federico II University Press. DOI: 10.6093/978-88-6887-147-5. ISBN:978-88-6887-147-5.
- **Scientific Committee Member** of The 1st International Online Conference on Infrastructures (IOCI 2022)", On-demand, June 7-9, 2022.
- **Chairman of the Poster Session on *"Safety Studies on Low-Volume Roads"***, The Transportation Research Board 101st Annual Meeting, Washington D.C., January 12, 2022.
- (2022) **Invited Chairman of the Poster Session on *"Safety Studies on Low-Volume Roads"***, *The Transportation Research Board 101st Annual Meeting*, Washington D.C., 12 January, 2022.
- **Guest Editor** of the Special Issue "*Automation and Information and Knowledge Model Technologies in Construction Engineering".* Buildings. (Publisher "MDPI"). ISSN 2075-5309.
- **Chair of the Evaluation Committee Board** for the assignment of n. 1 research fellow within the Research Project - PRIN 2017 "Stone Pavements, History, Conservation, Valorisation and Design". Aim: " Pavements Performance control indicators and its further implementation in BIM", University of Naples Federico II, December 17, 2021.

- (2021) **Invited Chairman** of the Transport Session "Valorization of waste and marginal materials for roads", *Mediterranean PhD School 2nd Edition "European Green Deal. The Contribution from Civil, Architectural and Environmental Engineering"*, Naples, Italy, 15 October, 2021.
- (2021) **Selection and Evaluation Board Member** for the Ph.D. Candidates research prize award competition of the *Mediterranean PhD School 2nd Edition "European Green Deal. The Contribution from Civil, Architectural and Environmental Engineering"*, Naples, Italy, 11-16 October, 2021.
- (2021-) **Editorial Board Member**. The Baltic Journal of Road and Bridge Engineering. ISSN: 1822-427X (Print), ISSN: 1822-4288 (Online). Publisher: Riga Technical University (RTU) Press.
- **International Advisory Panel** of *The 2nd International Conference on Civil and Environmental Engineering (ICCEE2022)*, On-demand, January 6-7, 2022.
- **Scientific Committee Member** of *The 10th International Conference on Transportation and Traffic Engineering (ICTTE 2021)*, Chengdu, China, December 24-26, 2021.
- **Scientific Committee Member** of *The International Conference on Resource Sustainability - Sustainable Pavement Technologies (icRS SPT 2021)*, On-demand, May 26-28, 2021.
- **Lead Editor** of the Special Issue "*BIM for Infrastructures: from Planning and Design to the Maintenance Phase".* Journal of Advanced Transportation. (Publisher "Hindawi"). Print ISSN: 0197-6729, Online ISSN: 2042-3195.
- **Guest Editor** of the Special Issue "*Innovative Practices into Road Pavement Maintenance Management".* Infrastructures. (Publisher "MDPI"). ISSN 2412-3811.
  (2020-) **Topic Editor**. *Infrastructure*. ISSN 2412-3811. https://www.mdpi.com/journal/infrastructures. Publisher: MDPI.
- **Chair of the Evaluation Committee Board** for the assignment of n. 1 research fellow within the Research Project - PRIN 2017 "Stone Pavements, History, Conservation, Valorisation and Design". Aim: "Implementation of a decision support system in the context of the maintenance processes of stone pavements", University of Naples Federico II, April 6, 2021.
- **Member of the Evaluation Committee Board** for the assignment of n. 1 scholarship within the Research Project - INSIST "Sistema di monitoraggio intelligente per la sicurezza di infrastrutture urbane". Aims: "design of eco-sustainable solutions for road maintenance treatments", University of Naples Federico II, January 7, 2020.
- **Member of the Evaluation Committee Board** for the assignment of n. 1 scholarship within the Research Project - INSIST "Sistema di monitoraggio intelligente per la sicurezza di infrastrutture urbane". Aims: "digitization of linear infrastructures and writing of modeling algorithms of security performance / service level / cost / degradation curves for road pavements ", University of Naples Federico II, November 25, 2020.
- **Member of the Evaluation Committee Board** for the assignment of n. 1 scholarship within the Research Project - INSIST "Sistema di monitoraggio intelligente per la sicurezza di infrastrutture urbane". Aims: " Implementation of the LCA procedure in a BIM environment for road paving", University of Naples Federico II, November 25, 2020
- **Member of the Evaluation Committee Board** for the assignment of n. 1 professional consultant within the Research Project - PRIN 2017 "Stone Pavements, History, Conservation, Valorisation and Design". Aim: "support activities for the translation / revision of texts, journals and scientific books from Italian in English on topics related to civil engineering".

- **Chairman of the Poster Session on *"Advancements in Geospatial Technologies for Design and Construction"***, The Transportation Research Board 99th Annual Meeting, Washington D.C., January 13, 2020.
- **Chairman of the AFB80(1) Standing Subcommittee on Geospatial Control**, The Transportation Research Board 98th Annual Meeting, Washington D.C., January 14, 2019.
- **Chairman of the Session 4 *"Road Safety and Human Factors"***, *The International Conference on Traffic and Transport Engineering ICTTE 2018*, Belgrade, November 27, 2018.
- **Chairman of the Session 21 "*I-BIM Infrastructure Building Information Modeling*",** *TIS International Congress on Transport Infrastructure and Systems,* Roma, Italy, April 10-12, 2017.
- (2019-) **Editorial Board Member**. C*ivil Engineering and Architecture*. ISSN: 2332-1091 (Print), ISSN: 2332-1121 (Online). *Publisher: Horizon Research Publishing.*
- (2019-) **Editorial Board Member.** *Transportation Research Interdisciplinary Perspectives* ISSN: 2590-1982. Publisher: Elsevier.
- (2016-) **Editorial Board Member**. *International Journal for Traffic and Transport Engineering (IJTTE)*. ISSN 2217-544X (print), ISSN 2217-5652 (online). Publisher: Scientific Research Journals Ltd. Serbia.
- (2018) **Scientific Committee Member** of *The International Conference on Traffic and Transport Engineering ICTTE,* Belgrado, Serbia, September 27-28, 2018.
- (2018) **Scientific Committee Member** of *The 7th International Conference on Transportation and Traffic Engineering ICTTE 2018*, Beijing, 21-23 December, 2018.
- (2016) **Scientific Committee Member** of The *International Conference on Traffic and Transport Engineering ICTTE,* Belgrado, Serbia, November 24-25, 2016.
- (2016) **Scientific Committee Member** of The *International Congress on Transport Infrastructure and Systems TIS,* Roma, Italy, April 10- 12, 2017.
- (2015-2016) Team Leader Safety Research Group, Smart Transportation Applications and Research Laboratory, University of Washington, Seattle, USA.

Coordinator of National Agreements:

- (2022) ICMQ S.p.A. and Department of Civil, Architectural and Environmental Engineering (University of Naples Federico II)
- (2022) Regione Toscana and Department of Civil, Architectural and Environmental Engineering (University of Naples Federico II). Amount: 79.900 €
- (2022) DBA PRO S.p.A. and Department of Civil, Architectural and Environmental Engineering (University of Naples Federico II). Amount: 30.000 €

Coordinator of International Agreements:

- (2018-) The Smart Transportation Applications and Research Laboratory (University of Washington) and Department of Civil, Architectural and Environmental Engineering (University of Naples Federico II)
- (2018-) Vilnius Gediminas Technical University and University of Naples Federico II
- (2017-) Erasmus+ Programme. University of Zagabria and University of Naples Federico II
- (2017-) Erasmus+ Programme. Polytechnic Institute of Viseu and University of Naples Federico II

Reviewer for Conferences:

- (2023) 12th International Conference Environmental Engineering, Vilnius, April 27-28, 2023;
- (2022) The Transportation Research Board 102nd Annual Meeting, On-demand, January 8-12, 2023
- (2022) AIIT 3rd International congress on New Scenarios for Transport Infrastructure and Systems, Roma, Italy, September 15-16, 2022
- (2021) The Transportation Research Board 101st Annual Meeting, On-demand, January 9-13, 2022
- (2021) 2nd International Conference on Civil and Environmental Engineering (ICCEE2022), On-demand, January 6-7, 2022
- (2021) The International Conference on Resource Sustainability - Sustainable Pavement Technologies (icRS SPT 2021), On-demand, May 26-28, 2021
- (2020) The Transportation Research Board 100th Annual Meeting, On-demand, January 5-29, 2021
- (2020) The 11th International Conference "Environmental Engineering", On-demand, May 21-22, 2020
- (2019) The Transportation Research Board 99th Annual Meeting, Washington D.C., USA, January 12-16, 2020
- (2018) The Transportation Research Board 98th Annual Meeting, Washington D.C., USA, January 13-17, 2019
- (2017) The Transportation Research Board 97th Annual Meeting, Washington D.C., USA, January 7-11, 2018
- (2016) The International Conference on Traffic and Transport Engineering, Belgrado, Serbia, November 24-25, 2016
- (2016) The International Congress on Transport Infrastructure and Systems, Roma, Italy, April 10-12, 2017

Reviewer for Journals:

- AIMS Materials Science (Publisher "AIMS Press"). ISSN: 2372-0484
- Applied Sciences (Publisher "MDPI"). ISSN: 2076-3417
- Arabian Journal for Science and Engineering (Publisher "Springer"). Print ISSN: 2193-567X, Online ISSN: 2191-4281
- Architectural Engineering and Design Management Publisher (Publisher "Taylor & Francis"). Print ISSN: 1745-2007, Online ISSN: 1752-7589
- Automation in Construction (Publisher "Elsevier"). Print ISSN: 0926-5805, Online ISSN: 1872-7891
- Buildings (Publisher "MDPI"). ISSN: 2075-5309
- CivilEng (Publisher "MDPI"). ISSN: 2673-4109
- Civil Engineering and Architecture (Publisher "Horizon Research"). Print ISSN: 2332-1091, Online ISSN: 2332-1121
- Computer and Electrical Engineering (Publisher "Elsevier"). Print ISSN: 0045-7906, Online ISSN: 1879-0755
- Computer Modeling in Engineering & Sciences (Publisher "Tech Science Press"). Print ISSN: 1526-1492, Online ISSN: 1526-1506
- Construction and Building Materials (Publisher "Elsevier"). Print ISSN: 0950-0618

- Engineering Applications of Artificial Intelligence (Publisher “Elsevier”), Print ISSN: 0952-1976, Online ISSN: 1873-6769
- Geo-spatial Information Science (Publisher “Taylor & Francis”), Print ISSN: 1009-5020, Online ISSN: 1993-5153
- Heliyon (Publisher “Cell Press”). ISSN 2405-8440
- Innovative Infrastructure Solutions (Publisher “Springer”). Print ISSN: 2364-4176, Online ISSN: 2364-4184
- International Journal of Environmental Research and Public Health (Publisher “MDPI”). Print ISSN: 1661-7827, Online ISSN: 1660-4601
- International Journal of Injury Control and Safety Promotion (Publisher “Taylor & Francis”). Print ISSN: 1745-7300, Online ISSN: 17458-7319
- International Journal of Pavement and Technology (Publisher “Springer”), Print ISSN: 1996-6814, Online ISSN: 1997-1400
- Journal of Advanced Transportation (Publisher “Hindawi”). Print ISSN: 0197-6729, Online ISSN: 2042-3195
- Journal of Traffic and Transportation Engineering - English Edition (Publisher “Elsevier”). ISSN: 2095-7564
- Journal of Zhejiang University-SCIENCE A (Publisher “Springer”). Print ISSN: 1673-565X/ eISSN: 1862-1775
- Measurement: Journal of the International Measurement Confederation (Publisher “Elsevier”). ISSN: 0263-2241
- Recycling (Publisher “MDPI”). ISSN: 2313-4321
- Sensors (Publisher “MDPI”). ISSN: 1424-8220
- Sustainability (Publisher “MDPI”). ISSN: 2071-1050
- Sustainable Cities and Society (Publisher “Elsevier”). ISNN: 2210-6707
- The Baltic Journal of Road and Bridge Engineering (Publisher “Vilnius Gediminas Technical University). Print ISSN: 1822-427X/ eISSN: 1822-4288
- Traffic Injury and Prevention (Publisher “Taylor & Francis”). Print ISSN: 1538-9588, Online ISSN: 1538-957X
- Transport (Publisher “Taylor & Francis”). Print ISSN: 1648-4142; Online ISSN: 1648-3480
- Transportation Research Interdisciplinary Perspectives *(*Publisher “Elsevier”). ISSN: 2590-1982
- Transportation Research Part C (Publisher “Elsevier”). ISSN: 0968-090X
- Transportation Research Part D (Publisher “Elsevier”). ISSN: 1361-9209
- Transportation Research Record: Journal of the Transportation Research Board (Publisher: “Transportation Research Record”). ISSN: 0361-1981
- Tunnelling and Underground Space Technology (Publisher “Elsevier”). Print ISSN: 0886-7798; Online ISSN: 1878-4364

Member of Professional Committee:

- (2024) Member of the Certification Committee of ITALCERTIFER S.p.A.
- (2023-) Member of IBIMI Aeroporti buildingSMART Italy
- (2022-) Member of Pavimentazioni Stradali Committee, Ordine degli Ingegneri della Provincia di Napoli

- (2022-) Member of AED80 Standing Committee on Visualization in Transportation, Transportation Research Board of the National Academies of Sciences
- (2019-) Member of AED80 (1) Standing Subcommittee on BIM for Infrastructure, Transportation Research Board of the National Academies of Sciences
- (2016-) Member of AFB80 Standing Committee on Geospatial Data Acquisition Technologies in Design and Construction, Transportation Research Board of the National Academies of Sciences
- (2017-2019) Member of AFB40 Standing Committee on Landscape and Environmental Design, Transportation Research Board of the National Academies of Sciences
- (2016-2019) Member of ABC10 Standing Committee on Strategic Management, Transportation Research Board of the National Academies of Sciences
- (2016-2017) Member of ABC30 Standing Committee on Performance Management, Transportation Research Board of the National Academies of Sciences
- (2014-2017) Member of AHD50 Standing Committee on Roadside Maintenance Operations, Transportation Research Board of the National Academies of Sciences

Member of Academic Societies:

- (2021-) Full Member of the Italian Academic Association on Road Infrastructures *S.I.I.V.* "Società Italiana di Infrastrutture Viarie"
- (2020-) *C.I.F.I.* "Collegio Ingegneri Ferroviari Italiani"
- (2012-2020) Young Member of *S.I.I.V.* "Società Italiana di Infrastrutture Viarie"
- (2012-) Young Member of the Italian Engineering Technical Association on Transport and Traffic *AIIT* "Associazione Italiana degli Ingegneri del Traffico e dei Trasporti"
- (2015-2017) Student Member of the Institute of Transportation Engineers

Event Organization Activities:

- (2022) Organizing Committee Member of XVIII International SIIV Summer School: Sustainable Pavements and Road Materials, Naples, September 5-9, 2022.
- (2021) Organizing Committee Member of the SIIV "Strade Ferrovie Aeroporti: Il contributo della SIIV nell'evoluzione", Naples, October 21-22, 2021.
- (2017) Organizing Committee Member of the SIIV Arena II Edition during The 15th SIIV Summer School "I-BIM Infrastructure-Building Information Modeling", Naples, September 5-8, 2017.
- (2013) Organizing Committee Member of the 19th National S.I.I.V. Conference on Innovative Technologies for Railway Infrastructures, Naples, October 30-31, 2013

Member of University of Naples "Federico II" Committees:

- (2021-) Member of the Review Group (GRIE) for the course of study in Civil Engineering
- (2021-) Member of DICEA Erasmus+ Committee Board
- (2019-) Member of the Coordination Support Board for the course of study in Civil Engineering
- (2014-) Member of the Civil, Architectural and Environmental Engineering Departmental Board
- (2014-2016) Member of the Professors – Students Join Committee for the evaluation of the degree programs
- (2014) Member of the Project "Messaggeri della Conoscenza". Scientific Coordinator: Prof. Gianluca Dell'Acqua

Member of other Committees:

- (2021-) Member of the Scientific Board of the Ph.D. Course in "Infrastructures and Transports" - School in Civil Engineering and Architecture, Rome "La Sapienza" University.
- (2015-2016) Student Member of the Institute of Transportation Engineers of University of Washington
- (2014-2016) Member of the Smart Transportation Applications and Research (STAR) Laboratory, University of Washington, Seattle, USA

PROPOSAL WRITING AND/OR GRANT MANAGEMENT ACTIVITIES

Participation in International Research Projects

- (2020-) *Passadeiras seguras e eficientes para cidades sustentáveis" [Safe and efficient pedestrian crossings for sustainable cities]* (Principal investigator: Prof. António Luís Pimentel Vasconcelos, Instituto Politecnico de Viseu, Portogallo).
- (2015-2016) TRB IDEA J-04/IDEA 82: "Active Safety-Collision Warning Pilot in Washington State" (Principal Investigator: Jerry Spears, Deputy Director at Washington State Transit Insurance Pool). *Project Assistance,* University of Washington.
- (2015-2016) Regional Map Based Analytical Platform for State-Wide Highway Safety Performance Assessment (Principal Investigator: Dr. Ali Hajbabaie, Assistant Professor at Washington State University). *Project Assistance,* University of Washington.
- (2015-2016) Bicycle Safety Analysis: Crowdsourcing Bicycle Travel Data to Estimate Risk Exposure and Create Safety Performance Functions (Principal Investigator: Dr. Haizhong Wang, Assistant Professor at Oregon State University). *Project Assistance,* University of Washington.
- (2015) National Cooperative Highway Research Program (NCHRP) Proposal 17-76: Guidance for the Setting of Speed Limits. *Research Group Member,* University of Washington. *[Not funded.*

Participation in Italian National Research Projects

- (2024-) **Local Principal Investigator** (University of Naples Federico II) of the Research Project "*Sustainable Pavement Information Modelling: a BIM-based tool for life cycle management of road pavements"* - PRIN: Progetti di Ricerca di Rilevante Interesse Nazionale, Italy.
- (2022-) **Member** of the University of Naples Federico II Research Unit of the National Center *"Sustainable Mobility Center (Centro Nazionale per la Mobilità Sostenibile – CNMS)"* – PNRR: Piano Nazionale Ripresa Resilienza, Italy.
- (2019-2023) **Local Principal Investigator** (University of Naples Federico II) of the Research Project "*Stone Pavements. History, Conservation, Valorisation and Design"* - PRIN: Progetti di Ricerca di Rilevante Interesse Nazionale, Italy.
- (2021-2022) **Member** of the Research Project *"Sistema di monitoraggio INtelligente per la Sicurezza delle infraSTrutture urbane" [Smart monitoring system for urban infrastructures safety]* - PON: Programma Operativo Nazionale.
- (2021) **Member** of the Research Project *"Progetto di ricerca e sviluppo per l'implementazione dei sistemi BIM sulla linea ferroviaria Benevento-Cancello gestita da EAV" [Research and development project for the implementation of BIM systems on the Benevento-Cancello railway line managed by EAV].*

- (2015) **Principal Investigator** of the Research Project "*Analisi della sicurezza stradale in ambito extraurbano"* [Road Safety Analysis on rural roads], Centro di Servizio di Ateneo per il Coordinamento di Progetti Speciali e l'Innovazione Organizzativa (COINOR), Italy.
- (2013-2015) Coordination and Support activities for the Research Program "Messaggeri della Conoscenza". Project ID 397 "*Construction Contracting",* Project ID 398 *"Construction Equipment and Method",* Project ID 480 "*Advanced Construction Equipment Management,* Project ID 482 "*Project Management.* Ministero dell'Istruzione, dell'Università e della Ricerca, Italy.
- (2014) **Principal Investigator** of the Research Project *"Analisi della Sicurezza della Viabilità esistente: influenza dei fattori umani e del contesto territoriale"* ["Safety Analysis of the existing roads: influence of the human factors and the local context"], Centro di Servizio di Ateneo per il Coordinamento di Progetti Speciali e l'Innovazione Organizzativa (COINOR), Italy. *[Not funded]*

SCHOLARLY ACTIVITIES

- Thesis and Dissertation: 2
- Articles in Peer-Reviewed Scholarly Journals and indexed Conference Proceedings (Published, Accepted or Recommended for Publication): 69
- Articles in Peer-Reviewed Conference Proceedings (Published, Accepted, or Recommended for Publication): 14
- Articles in peer-reviewed Books and other Journals (Published, Accepted, or Recommended for Publication): 11

Thesis and Dissertation

- Biancardo S.A., 2016. *"Modeling Highway Geometric Design Consistency using Operating Speed and Safety Data". (*Ph.D. thesis, URI: http://www.fedoa.unina.it/11076/)
- Biancardo S.A., 2012. *Relazioni tra funzioni di performance della sicurezza delle strade e dinamica dell'incidente.* [Relationships between road safety performance functions and crash type] (Unpublished degree thesis, Engineering Faculty, University of Naples "Federico II", Italy).

Articles in peer-reviewed Scholarly Journals and Indexed Conference Proceedings (Published, accepted or recommended for publication)

1. Bing L., Yue H., **Biancardo S.A.**, Xiaolei M, 2024. Unveiling built environment impacts on traffic CO2 emissions using Geo-CNN weighted regression. *Transportation Research Part D: Transport and Environment*, 132. DOI: 10.1016/j.trd.2024.104266. ISSN 1361-9209.
2. **Biancardo S.A.**, Zito L., Frascarino A., Intignano M., Di Fonzo F., Abbondati F., Dell'Acqua G. (2024). Digital information management of railway constructions: analysis comparison of technologies for BIM modeling. *Ingegneria Ferroviaria.* DOI: 10.57597/IF.0708.2024.ART.2. ISSN 0020-0956.
3. Xiao G., Wang T., Shang W., Shu Y., **Biancardo S.A.**, Jiang Z., 2024. Exploring the factors affecting the performance of shipping companies based on a panel data model: A perspective of antitrust exemption and shipping alliances. *Ocean & Costal Management*, 253. DOI: 10.1016/j.ocecoaman.2024.107162. ISSN: 0964-5961.

4. Chen X., Wei C., Yang Y., Luo L., **Biancardo S.A.**, Mei X., 2024. Personnel Trajectory Extraction From Port-Like Videos Under Varied Rainy Interferences. *IEEE Transactions on Intelligent Transportation Systems*. DOI: 10.1109/TITS.2023.3346473 ISSN (print): 1524-9050 | ISSN (online): 1558-0016.
5. **Biancardo S.A.**, Palazzo S., Intignano M., Dell'Acqua G., 2023. BIM for Railway Infrastructure: The Case Study of the Ogliastro-Sapri High-Speed Rail. *In the Proceedings of The 12th International Conference "Environmental Engineering"*, Vilnius Gediminas Technical University, LT, April 27-28, 2023, DOI: 10.3846/enviro.2023.916.
6. Salzano A.; Intignano M.; Mottola C.; **Biancardo S.A.**; Nicolella M.; Dell'Acqua G., 2023. Systematic Literature Review of Open Infrastructure BIM. *Buildings*, *13*, 1593. DOI: https://doi.org/10.3390/buildings13071593. ISSN: 2075-5309.
7. Abbondati F.; **Biancardo S.A.**; Veropalumbo R.; Chen, X.; Dell'Acqua G., 2023. An Adaptive Neuro-Fuzzy Inference System for Assessing Runway Friction Decay. *Measurement*, 187, 112737. DOI: 10.1016/j.measurement.2023.112737. ISSN: 0263-2241.
8. **Biancardo S.A.**, Intignano M., Menegusso Pires D., Abbondati F., Dell'Acqua G., 2023. Heritage BIM Approach for roman pavements. *European Transport \ Trasporti Europei* 91, 8. DOI: 10.48295/ET.2023.91.8. ISSN 1825-3997
9. **Biancardo S.A.**; Intignano M.; Veropalumbo R.; Martinelli R.; Calvanese V.; Autelitano F.; Garilli E.; Giuliani F.; Dell'Acqua G., 2023. BIM approach for Stone Pavements in Archaeological Sites: the case study of Vicolo dei Balconi of Pompeii. *Transportation Research Interdisciplinary Perspectives*, 100755. DOI: *10.1016/j.trip.2023.100755*. ISSN: 2590-1982.
10. Oreto C.; **Biancardo S.A.**; Abbondati F.; Veropalumbo R., 2023. Leveraging Infrastructure BIM for Life-Cycle-Based Sustainable Road Pavement Management. *Materials 16*, 1047. DOI: 10.3390/ma16031047. ISSN: 1996-1944.
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1. **Biancardo S.A.**, Intignano M., De Paola F., Dell'Acqua G. VIASTRATA®: The New Frontiers of BIM for the Digitalisation and Management of Infrastructures. *Recent Topics in Highway Engineering - Up-to-date Overview of Practical Knowledge*. IntechOpen, May 23, 2024. DOI: 10.5772/intechopen.1005379.
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CONFERENCE ATTENDANCE

- Transportation Research Board 104th Annual Meeting, Washington D.C., January 5-9, 2025.
- 15th International Scientific Conference "Transbaltica 2024: Transportation Science and Technology", Vilnius, September 19-20, 2024.
- EWGT 2024 – Euro Working Group on Transportation Conference, Lund, September 4-6, 2024.
- 12th International Conference "Environmental Engineering, Vilnius, April 27-28, 2023.
- Transportation Research Board 102nd Annual Meeting, Washington D.C., January 8-11, 2023.
- AIIT 3rd International congress on New Scenarios for Transport Infrastructure and Systems, Roma, Italy, September 15-16, 2022.
- IOCI 2022: The 1st International Online Conference on Infrastructures, On-demand, June 7- 9, 2022.
- Transportation Research Board 101st Annual Meeting, Washington D.C., January 9-13, 2022.
- 12th International Scientific Conference "Transbaltica 2021: Transportation Science and Technology", On-demand, September 16-17, 2021.
- 1st International Workshop on High-Speed Rail Socioeconomic impacts, On-demand, September 14-15, 2021.
- 2021 International Conference on Resource Sustainability - Sustainable Pavement Technologies (icRS SPT 2021), On-demand, May 26-27, 2021.
- Transportation Research Board 100th Annual Meeting, On-Demand, January, 2021.
- NKE | BIM CONFERENCE 2020, On-demand, December 10, 2020.
- Autodesk University 2020, On-demand, November 17-20, 2020.
- Virtual ACCELERATE ProjectWise Conference, On-demand, April 20-23, 2020.
- Transportation Research Board 99th Annual Meeting, Washington D.C., January 12-16, 2020.

- Transportation Research Board 98th Annual Meeting, Washington D.C., January 13-17, 2019.
- The International Conference on Traffic and Transport Engineering, Belgrade, November 27-28, 2018.
- Transportation Research Board 97th Annual Meeting, Washington D.C., January 7-11, 2018.
- Transportation Research Board 96th Annual Meeting, Washington D.C., January 8-12, 2017.
- Transportation Research Board 95th Annual Meeting, Washington D.C., January 10-14, 2016.
- Transportation 94th Research Board Annual Meeting, Washington D.C., January 11-15, 2015.
- Transportation Research Board 93rd Annual Meeting, Washington D.C., January 12-16, 2014.
- PacTrans Region 10 Student Transportation Conference 2015, Seattle, USA, October 17, 2015.
- PacTrans Region Regional Transportation Conference 2015, Seattle, USA, October 16, 2015.
- Construction Industry Research Conference "Building Tomorrow Today", Seattle, USA, March 6, 2015.
- TransOvation Conference, Redmond, USA, November 17-19, 2014.
- PacTrans Region 10 Student Transportation Conference 2014, Seattle, USA, October 18, 2014.
- PacTrans Regional Transportation Conference: The IOUs of Safety - Infrastructure, Operations and Users, University of Washington campus, Seattle, October 17, 2014.
- 5th International Conference on "Safety and Security Engineering" SAFE 2013, Wessex Institute of Technology, Rome, Italy, September 17-19, 2013.

PUBLIC SPEAKING EVENTS

- Transportation Research Board 104th Annual Meeting, Washington D.C., January 6 and January 8, 2025 (Podium presentation: "VPL and Ontologies within Building Information Modeling Framework for Stone-Paved Roads", Poster Presentation: "*Ontology-Driven Semantic Enhancement and VPL-Based Workflow for Modeling Automation of a Stone-Paved Road Building Information Model"*).
- 15th International Conference "Environmental Engineering, Vilnius, September 20, 2024 (*BIM as-Built workflow for road infrastructure*)
- EWGT 2024 – Euro Working Group on Transportation Conference, Lund, September 5, 2024 (*As-Built of Road Infrastructure: a workflow using the BIM-based tool OpenRoads Designer*)
- 12th International Conference "Environmental Engineering, Vilnius, April 28, 2023 *("BIM for railway infrastructure: the case study of the Ogliatro-Sapri High Speed Rail"*).
- National Workshop "Gestione sostenibile delle pavimentazioni stradali e aeroportuali", Palermo, Italy, September 21, 2022 (**Invited Presentation** for *"Modellazione e gestione informativa di pavimentazioni stradali a elementi" [Modeling and information management of road pavements elements]).*
- AIIT 3rd International congress on New Scenarios for Transport Infrastructure and Systems, Roma, Italy, September 16, 2022 ("*Heritage Building Information Modeling Approach for Roman Pavements").*
- Workshop PRIN 2017 "in itinere" Stone Pavements. History, conservation, valorisation and design, Università degli Studi di Napoli "Federico II", September 9, 2022 *("Modellazione di pavimentazioni in pietra in ambiente BIM" [Stone pavements modeling in a BIM environment]).*

- Technical Workshop XVIII International SIIV Summer School | Sustainable Pavements and Road Materials, Naples, September 5, 2022 ("*Sistemi di supporto alla gestione delle pavimentazioni stradali in ambiente BIM*" [Support systems for the management of road pavements in a BIM environment]*).*
- GWCAEE-2022. Global Webinar on Civil, Architectural and Environmental Engineering, On-demand, August 22, 2022 **(Invited Presentation** for *"Computational Design for As-Built Modeling of Roman Pavements"*).
- IOCI 2022: The 1st International Online Conference on Infrastructures. Session BIM: Building Information Modelling for Infrastructure Management. Information exchange and interoperability for a collaborative lifecycle work. Industry Foundation Classes (IFC), On-demand, June 9, 2022 (**Invited Presentation:** *"Integrated BIM-based LCA for road asphalt pavements"*).
- NATO Advanced Training Courses "Monitoring and Protection of Critical Infrastructure by Unmanned Systems", On-demand, June 2, 2022 (**Invited Presentation:** *"BIM for Roads and Railways: State-of-the-Art Review and Practical Aspects"*).
- V-ASET2022 6th Edition of Applied Science, Engineering and Technology Virtual, On-demand, April 22, 2022 (**Invited Presentation:** *"HBIM Approach for Historic Pavement Digitalization and Management"*).
- Transportation Research Board 101st Annual Meeting, Washington D.C., January 5, 2022 (Poster Presentation: "*Lifecycle Cost Analysis-Building Information Modeling Integration for Road Pavement Maintenance"*).
- 12th International Scientific Conference "Transbaltica 2021: Transportation Science and Technology", On-demand, September 17, 2021 (**Invited Presentation:** *"Stone Paved Road Digital Reproduction: a Workflow"*).
- 1st International Workshop on High-Speed Rail Socioeconomic impacts, On-demand, September 14, 2021 *(*Podium Presentation: *"Marrying Cost-Benefit Analysis with Building Information Modeling: the case study of Napoli-Bari High-Speed Rail").*
- Transportation Research Board 100th Annual Meeting, On-demand, January, 2021 (Poster Presentation: "*Heritage-BIM approach for Historical Urban Pavements: the case study of Via Duomo in Naples"*).
- Transportation Research Board 99th Annual Meeting, Washington D.C., January 12-16, 2020 (Poster Presentation: "*A Data-Driven Methodology for Estimating Per-Lane Free-Flow Speed for Freeways"*).
- Tunnelling 4.0 information technology for the design, construction and maintenance of underground works, Naples - Mostra d'Oltre Mare, May 3-4, 2019. (Podium Presentation: "*BIM for infrastructure design: Case history*").
- Transportation Research Board 98th Annual Meeting, Washington D.C., January 13-17, 2019 (Poster Presentation: "*Influence of fly ashes as alternative filler in asphalt mixtures"*).
- The International Conference on Traffic and Transport Engineering, Belgrade, November 27-28, 2018. (Podium Presentation: *BIM Reverse Engineering: Digital Transformation of Existing Roads)*.
- Transportation Research Board 97th Annual Meeting, Washington D.C., January 7-11, 2018 (Poster Presentation: "*A method of speed data fusion based on Bayesian Combination Algorithm and Markov Model"*).

- Transportation Research Board 96th Annual Meeting, Washington D.C., January 8-12, 2017 (Poster Presentation: "*Approaches to improving geometric configurations and level of service of intersections under low-volume conditions"*).
- Transportation Research Board 95th Annual Meeting, Washington D.C., January 10-14, 2016 (Podium Presentations: *Modeling Highway Consistency using Operating Speed and Safety Data;* Poster Presentation: "*Adaptation to Standards or New Design Shape? Level of Service and Safety by Varying a Grade-Level Intersection into a Roundabout*").
- PacTrans Region 10 Student Transportation Conference 2015, Seattle, USA, October 17, 2015 (Poster Presentation: *"Methodology for Evaluating Roadway Geometric Design Consistency by using Speed and Safety Data").*
- PacTrans Region Regional Transportation Conference 2015, Seattle, USA, October 16, 2015 *(*Podium Presentation: *"Roadway Design Consistency Evaluations for Two-Lane Rural Roads using Operating Speed and Safety Data").*
- Construction Industry Research Conference "Building Tomorrow Today", Seattle, USA, March 6, 2015 (Poster Presentation: "*A Categorization of Subcontracting Practices in the Pacific Northwest").*
- Congress for the dissemination of the results achieved during the Research Programs "Messaggeri della Conoscenza", Department of Civil, Architectural and Environmental Engineering, University of Naples Federico II, February 27, 2015. ("*Investigation on Emergent Subcontracting Approaches*").
- PacTrans Region 10 Student Transportation Conference 2014, Seattle, USA, October 18, 2014. *(*Poster Presentation: *"Consistent Approach to Predictive Modeling and Countermeasure Determination by Crash Type for Low-Volume Roads").*
- Transportation Research Board 93rdAnnual Meeting, Washington D.C., January 12-16, 2014 (Podium Presentation: "*Crash Severity Prediction Functions on Italian Rural Roads"*)
- 5th International Conference on "Safety and Security Engineering" SAFE 2013, Wessex Institute of Technology, Rome, Italy, September 17-19, 2013 (**Invited presentation:** "*A statistical look at gender and age differences as related to the injury crash type on low-volume roads"*).

Other Presentations

- *"Le nuove frontiere del BIM per la digitalizzazione e gestione delle infrastrutture"* [The new frontiers of BIM for the digitalization and management of infrastructures], Futuro Remoto 2023, Città della Scienza, Napoli, 23 November, 2023
- *"Computational design nel processo H-BIM per la modellazione di strade in pietra"* [Computational design in the H-BIM process for stone road modeling], Workshop PRIN 2017 "in itinere" Stone Pavements. History, conservation, valorisation and design, Università degli Studi di Napoli "Federico II", 22 October, 2021.
- *"Heritage BIM per la modellazione di strade urbane in pietra"* [Heritage BIM for modeling urban stone road], Webinar FAD -BIM per Infrastrutture SMART nella transizione digitale, AIIT, 25 June, 2021.
- *"L'ottimizzazione di un tracciato per l'alta velocità ferroviaria con Trimble Quantm"* [High-speed rail alignment optimization using Trimble Quantm], Webinar, Harpaceas, 23 March, 2021.
- *"I-BIM: modellazione parametrica del solido stradale",* BIM VIEWS 2019 - Esperienze e scenari, Napoli, Scuola Politecnica e delle Scienze di Base, 7 June, 2019.

- *"Effect of Using Alternative Fillers in Asphalt Mixtures*", Smart Transportation Applications and Research (STAR) Laboratory, Department of Civil & Environmental Engineering, University of Washington, Seattle (WA) USA, January 4, 2019.
- *"Going Digital with BIM and Bentley OpenRoads Designer, ContextCapture, ConceptStation, OpenRail Designer"*. Connected data environment e strumenti per il futuro digitale nelle Infrastrutture, Arena Digital&BIM, SAIE, Bologna, 18 October, 2018.
- *"Reverse Engineering delle Infrastrutture lineari in ambiente BIM"* [Reverse Engineering of Linear Infrastructures in BIM context]. Session 6 – Lecture #6.6. The 15th SIIV Summer School "I-BIM Infrastructure-Building Information Modeling", Napoli, September 7, 2018.
- *"Infrastructure-Building Information Modeling: aspetti operative"* [Infrastructure-Building Information Modeling: operational aspects]. Il BIM per le Infrastrutture lineari - Opportunità, Criticità, Prospettive. Sala Convegni ANAS, Bari, March 23, 2018.
- *"Methodology to evaluate Road adjustment treatments effectiveness on existing rural roads"*, Smart Transportation Applications and Research (STAR) Laboratory, Department of Civil & Environmental Engineering, University of Washington, Seattle (WA) USA, January 13, 2017.
- Winding-up speech *"BIM experience in infrastructural large projects: Doha Metro - Al Jadeda Station al Matar B case study"*. Eng.Alfredo Ingletti, 3TI Progetti Italia S.p.A., Department of Civil, Architectural and Environmental Engineering, University of Naples Federico II, School of Polytechnic and Basic Sciences, December 12, 2016.
- *"Procedura per la valutazione dell'efficacia degli interventi di adeguamento di strade extraurbane"* [Methodology to evaluate Road adjustment treatments effectiveness on existing rural roads], SIIV Arena – I Edition, Bologna, November 29, 2016.
- "*Modeling Highway Consistency using Operating Speed and Safety Data*", Washington State Department of Transportation (WSDOT), Olympia, USA, March 11, 2015.
- *"Funzioni di performance della sicurezza stradale per la viabilità ordinaria della Provincia di Salerno"* [Safety performance functions for rural roads localized in Salerno], CPMSS Provincia di Salerno, May 16, 2012.

TEACHING ACTIVITIES

Teaching Activities at the University of Naples "Federico II"

- (2024) Professor of "*Progettazione stradale e ferroviaria in ambiente BIM"* [Highway and Railway Design in BIM Environment] (Master Second Level Degree on: BIM and Sustainable Integrated Design – 3 CFU)
- (2022-) Professor of "*Infrastructure-Building Information Modeling"* (MSc degree course – 9 CFU – English Language)
- (2022-) Professor of "Strade e BIM per Infrastrutture" *[Roads and BIM for Infrastructure]* (BSc degree course – 9 CFU)
- (2020-2021) Professor of *Laboratorio BIM per le Infrastrutture Lineari [BIM Lab for Road Infrastructures,* (3 CFU), Department of Architecture
- (2020) Lecture on "*OpenRail ConceptStation for Railways Design"*, Second-level Professional Master's Programme in Geotechnical for Infrastructures

- (2019) Professor of "BIM Lab". Second-level Professional Master's Programme, FS Mobility Academy-University of Naples Federico II.
- (2018, 2022) Professor of "I-BIM: Infrastructure-Building Information Modeling". Ph.D. class in Civil System Engineering Doctoral Degree (3 CFU – English Language)
- (2018-2021) Professor of "Costruzione di Strade, Ferrovie e Aeroporti" *[Constructions of Roads, Railways and Airports]* (BSc degree course – 9 CFU)
- (2018-2021) Professor of "Costruzione e Gestione di Strade, Ferrovie e Aeroporti" *[Constructions and Management of Roads, Railways and Airports]* (BSc degree course – 6 CFU)
- (2017-2020) Professor of "Strade, Ferrovie e Aeroporti" *[Roads, Railways and Airports]* (BSc degree course – 7 CFU)
- (2017-2023) Teaching Assistance for "*Progettazione di Infrastrutture in Ambiente BIM"* [Infrastructure Design in BIM Environment], (Master Second Level Degree on: BIM and Sustainable Integrated Design – 3 CFU)

Supervision Activities Summary Statistics:

- Supervisor of Research Fellows:
  - ✓ (2022) Indicatori di controllo delle prestazioni di pavimentazioni con successiva implementazione in ambiente BIM *[Pavements performance control indicators and its further implementation in BIM]* (Nunzio Viscione)
  - ✓ (2021) Manutenzione predittiva delle pavimentazioni in ambiente BIM *[Pavement predictive maintenance in a BIM environment]* (Rosa Veropalumbo)

- Supervisor of Ph.D. students in Ph.D. Program in "Civil Systems Engineering":
  - ✓ (2022-) "Generative Design and Visual Programming Language for Road-BIM" (Mattia Intignano);
  - ✓ (2020-2023) "Civil Information Modeling of road pavement maintenance processes" (Cristina Oreto);
  - ✓ (2020-2023) "Design and verification of asphalt blends made with marginal materials" (Diego Menegusso Pires).

- Supervisor of graduate students in Master Science's Degree on "Roads, Railways, Airports":
  - ✓ (2023) Digitalizzazione di infrastrutture ferroviarie: codici di calcolo BIM Authoring Trimble Novapoint *[Digitization of railway infrastructures: Trimble Novapoint BIM-based Authoring Tool]* (Leonardo Zito)
  - ✓ (2022) Modellazione BIM di una infrastruttura ferroviaria: il caso studio del collegamento ferroviario AV Ogliastro-Sapri *[BIM modeling of a railway infrastructure: the case study of the HS Ogliastro-Sapri]* (Sabrina Palazzo)
  - ✓ (2022) Modellazione Informativa e Interoperabilità IFC per la progettazione delle infrastrutture Stradali *[Road Infrastructure Design using Information Modeling and IFC Interoperability]* (Carmine Ferraro)
  - ✓ (2021) Il BIM per la pianificazione di infrastrutture: implementazione dell'ACB nel caso studio della AV/AC Napoli-Bari *[BIM for infrastructure planning: implementation of CBA in the HS/HC Napoli-Bari case study]* (Davide Savastano)

- ✓ (2021) Soluzioni manutentive ecosostenibili per pavimentazioni stradali *[Ecosustainable maintenance solutions for Road pavements]* (Daniele Lubrano)
- ✓ (2021) Formato aperto BIM per la modellazione delle infrastrutture *[OpenBIM format for infrastructure modeling]* (Andriy Ostashov)
- ✓ (2021) Integrazione dell'Analisi Costi-Benefici (ACB) nel Building Information Modeling (BIM): il caso studio dell'AV/AC Napoli-*Bari [Marrying Cost-Benefit Analysis (CBA) with Building Information Modeling (BIM): the case study of Napoli-Bari High-Speed Rail]* (Michele Gesualdi);
- ✓ (2021) Interoperabilità e livello di fabbisogno informativo nel BIM per opere pubbliche *[Interoperability and level of information need in BIM for public works]* (Pietro Ruocco)*;*
- ✓ (2021) Life Cycle Assessment di miscele bituminose per pavimentazioni stradali contenenti materie prime seconde *[Life Cycle Assessment of bituminous mixtures for road pavements containing secondary raw materials]* (Ada Frascarino);
- ✓ (2021) Ottimizzazione del tracciato ferroviario a servizio dell'Aeroporto del *Salento [Railway Alignment Optimization: Brindisi Airport Connection Case Study]* (Fabiana Fiorentino);
- ✓ (2020) Reverse engineering for Railway-BIM: the case study of the Gradec-Sveti Ivan Žabno connection in Croatia (Mirko Spasiano);
- ✓ (2020) Algoritmi di ottimizzazione dei corridori infrastrutturali: il caso studio del nuovo collegamento ferroviario AV Ogliastro-Sapri *[Optimization algorithms for infrastructure corridors: the case study of the Ogliastro-Sapri high-speed railway]* (Ernesto Di Lisa);
- ✓ (2020) Studio di fattibilità della direttrice Battipaglia-Reggio Calabria: analisi dell'innesto ferroviario AV in località Villammare *[Feasibility study for the Battipaglia-Reggio Calabria route: analysis of the high-speed railway connection in Villammare]* (Francesco Avella);
- ✓ (2020) Integration of BIM and procedural modeling tools for road design (Alessandra Capano);
- ✓ (2020) Integration of Building Information Modeling (BIM) and Life Cycle Cost Analysis (LCCA): The case study of Estradas Nacionais (EN2) in Portugal (Luigi Massotti);
- ✓ (2020) Supporto alla gestione dei processi di manutenzione delle sovrastrutture stradali in ambiente BIM *[Road pavements maintenance by BIM support system]* (Sara Iannitti);
- ✓ (2020) Impiego degli inerti dolomitici nella costruzione degli strati superficiali delle sovrastrutture stradali flessibili *[Use of Dolomite aggregates in the construction of flexible road pavements]* (Antonello Inverso);
- ✓ (2020) Integration of BIM and Procedural Modeling Tools for Railway Design (Mattia Intignano).
- ✓ (2020) Reverse Engineering di pavimentazioni storiche urbane: la modellazione BIM di Via Duomo a Napoli *[Reverse Engineering of Historical Urban Pavements: BIM of Via Duomo in Naples]* (Claudio Sorbino);
- ✓ (2020) Design computazionale per la modellazione solida parametrica delle sovrastrutture stradali ad elementi modulari *[Computational design for modular stone pavements parametric modeling]* (Lorenzo Mazzei);
- ✓ (2020) Gestione in ambiente BIM delle caratteristiche prestazionali di una pavimentazione stradale *[Management of road pavement performance characteristics in BIM environment]* (Floriana Simonelli);
- ✓ (2019) I-BIM: Modellazione parametrica del Bridge IV per l'ampliamento dell'area partenze dell'Aeroporto Internazionale di Napoli "Capodichino" [*I-BIM: Bridge IV parametric modeling for the enlargement of the departue area of the Naples "Capodichino" International Airport]* (Emanuele Sannino);

- ✓ (2019) Le pavimentazioni stradali in pietra: H-BIM di "Via del Vesuvio" nel sito archeologico di Pompei *[Stone road pavements: H-BIM of "Via del Vesuvio" in the archaeological site of Pompeii]* (Letizia Di Rosario);
- ✓ Analisi delle potenzialità nell'uso dei software di micro-simulazione stradale a supporto della progettazione in ambiente BIM *[Analysis of the opportunities in the use of road micro-simulation software to support design in BIM environment* (Amedeo Zampi);
- ✓ (2019) Utilizzo di tecnologie SAPR e metodologia BIM per il rilievo e la modellazione di un viadotto ferroviario *[SAPR technologies and BIM methodology for surveying and modeling a railway viaduct]* (Pasquale Carandente Tartaglia);
- ✓ (2018) BIM: Modellazione parametrica del solido stradale *[BIM: parametric modeling of a road corridor]* (Marco Esposito);
- ✓ (2018) Modellazione in ambiente BIM del solido stradale: il caso studio della SS18 VAR Cilentana *[Parametric Modeling of road corridor suing BIM: SS18 VAR Cilentana]* (Davide Ferrara);
- ✓ (2018) Bim per le infrastrutture: interoperabilità e codici di calcolo *[BIM for infrastructures: interoperability and software tools]* (Rosaria Colonna and Chiara Tucci).

- Supervisor of undergraduate students in Bachelor's degree on "Roads, Railways, Airports":
  - ✓ (2024) Trasporto a levitazione magnetica: ferrovie innovative e applicazioni future *[Magnetic Levitation Transport: Innovative Railways and Future Applications]* (Gabriele Marco Scognamiglio)
  - ✓ (2024) Il BIM al servizio delle infrastrutture ferroviarie *[BIM for railways infrastructure]* (Ludovica Nappi)
  - ✓ (2024) La scomposizione tecnologico-funzionale di una sezione ferroviaria e il ruolo delle traversine *[The technological-functional breakdown of a railway section and the role of sleepers]* (Giovanni Fiume)
  - ✓ (2023) Le pavimentazioni stradali rigide: aspetti generali e riciclaggio di RAP *[Rigid road pavements: general aspects and RAP recycling]* (Simone Luongo)
  - ✓ (2023) Applicazione del BIM nel Nuovo Codice dei Contratti Pubblici *[BIM Application in the New Italian Public Contracts Code]* (Giovanni Renella)
  - ✓ (2023) Modellazione BIM della linea ferroviaria AV/AC Treviglio – Brescia *[BIM Modeling of the Treviglio – Brescia HS/HC Railway Line]* (Marika Marigliano)
  - ✓ (2023) Digitalizzazione preliminare di un tronco della Strada di Grande Comunicazione Firenze-Pisa-Livorno *[Road section preliminary digitalization: Firenze-Pisa-Livorno Highway case study]* (Francesco Granata)
  - ✓ (2023) Il riciclaggio delle pavimentazioni stradali: norme tecniche e processi produttivi *[Recycling of road pavements: technical standards and production processes]* (Francesco Matrone)
  - ✓ (2023) Le materie prime secondarie nella costruzione delle sovrastrutture stradali *[Secondary raw materials in the construction of road superstructures]* (Fabio Cangiano)
  - ✓ (2022) Progettazione e modellazione di intersezioni stradali *[Road intersections design and modeling]* (Vincenzo Merolla)
  - ✓ (2022) Analisi della rigidezza di pavimentazioni stradali flessibili *[Stiffness analysis of road flexible pavements]* (Federica Raimo)

- ✓ (2022) Effetto delle proprietà volumetriche sulle performance meccaniche di miscele in conglomerato bituminoso *[Effects of volumetric properties on mechanical performance of asphalt pavement]* (Giovanni Carlucci)
- ✓ (2022) Analisi del comportamento a fatica di miscele in conglomerato bituminoso per pavimentazioni stradali flessibili [Fatigue damage analysis of asphalt mixtures for road flexibile pavements] (Romeo Perrella)
- ✓ (2022) Il BIM per le infrastrutture ferroviarie: stato dell'arte e applicazioni *[BIM for railway infrastructures: state of the art and applications]* (Pietro Serra)
- ✓ (2022) Airport management system per la gestione della manutenzione pluriennale delle pavimentazioni aeroportuali *[Airport Pavement Management System for airport pavements maintenance management]* (Clelia Marino)
- ✓ (2021) Indicatori di controllo delle caratteristiche funzionali di una pavimentazione nella redazione di un PMS *[Functional performance indicators of a road pavement for making a PMS]* (Andrea Uttieri)
- ✓ (2021) Il quadro normativo BIM e modellazione 3D di un tronco stradale con Bentley OpenRoads Designer *[BIM regulatory framework and 3D-road modeling using Bentley OpenRoads Designer] (*Alfonso Emanuele Ceres);
- ✓ (2021) Caratteristiche geometriche e funzionali delle intersezioni stradali *[Geometric design and functional features of road intersections]* (Ilaria Migliore);
- ✓ (2020) L'utilizzo del BIM per le infrastrutture linear in Italia *[The use of BIM for road infrastructure in Italy]* (Andolfi Pierluigi);
- ✓ (2020) Analisi di sicurezza e proposta di interventi di adeguamento di strade esistenti: il caso studio della strada statale 268 del Vesuvio *[Safety analysis and interventions proposal for existing roads: The casy study of SS268 Vesuvio state road]* (Filomena De Falco);
- ✓ (2020) Moderazione del traffico veicolare ed ipotesi di intervento *[Traffic claming and intervention hypothesis]* (Elena Spano);
- ✓ (2020) Le pavimentazioni storiche e moderne ad elementi *[Hystorical and modern modular pavements]* (Castrese Fabozzi);
- ✓ (2020) Le pavimentazioni storiche ad elementi *[Hystorical modular pavements]* (Loris Caldoro);
- ✓ (2019) Tracciamento e verifica dei tornanti stradali con approccio BIM. Il caso studio della Variante di Rocca Cilento [Harpin bend design and check using BIM approach: The case stady of Rocca Cilento variant] (Giovanna Ponticiello);
- ✓ (2019) I-BIM: modellazione parametrica della airside aeroportuale di Lamezia Terme "Sant'Eufemia" *[I-BIM: parametric modeling of Lamezia Terme "Sant'Eufemia" airside]* (Antonio Varricchio);
- ✓ (2019) Tecniche e strumenti di acquisizione di dati caratteristici per la progettazione delle infrastrutture in ambiente BIM *[Data acquisition methods and tools for infrastructures design using BIM]* (Michele Gesualdi);
- ✓ (2018) Reconstruction Project of Lithuanian National Significance Road No. 3017 Velžys–Jotainiai–Pagiriai–Šėta Section from 22.28 Km to 26.60 Km (Žygimantas Mažeikis);
- ✓ (2018) Reconstruction Project of Lithuanian National Significance Road No. 3017 Velžys–Jotainiai–Pagiriai–Šėta Section from 27.00 Km to 32.71 Km (Lukas Čibinskas);
- ✓ (2018) Progettazione e modellazione di un tronco stradale extraurbano in ambiente BIM [*Rural road planning and modeling using BIM]* (Daniele Lubrano Di Giunno);

- ✓ (2018) BIM per le infrastrutture: stato dell'arte e le sue prospettive *[BIM for Infrastructures: state of art and its perspectives]* (Verdiana Gaita);
- ✓ (2018) I-BIM: Modellazione del solido stradale mediante il codice di calcolo CIVIL 3D *[I-BIM: modeling a road corridor by using CIVIL 3D tool]* (Giuseppe Russo);
- ✓ (2017) Sistemi elettronici BIM per infrastrutture civili *[BIM electronic systems for civil infrastructures]* (Claudio Sorbino);
- ✓ (2017) Building Information Modeling: la digitalizzazione del corpo stradale *[Building Information Modeling: road corridor digitization]* (Imma Di Francesco);
- ✓ (2017) Modellazione del solido stradale in ambiente BIM [*Road corridor modeling in BIM environment*] (Mario Cerbone);
- ✓ (2017) Building Information Modeling: modellazione del solido stradale mediante il codice di calcolo Civil 3D (Stella Principe);
- ✓ (2017) Building Information Modeling: modellazione del solido stradale mediante codice di calcolo Bentley Systems *[Building Information Modeling: road corridor modeling by using Bentley Systems tool]* (Lorenzo Mazzei);
- ✓ (2017) Strumenti Elettronici BIM per la modellazione delle infrastrutture *[BIM electronic tools for infrastructure modeling]* (Andriy Ostashov);
- ✓ (2017) Il BIM per le infrastrutture *[BIM for infrastructures]* (Giuseppe Apicella and Raffaele D'Albero);
- ✓ (2017) BIM per opere viarie: il caso studio della SS18VAR 'Cilentana' *[BIM for road infrastructures: SS18 VAR 'Cilentana' case study]* (Simone Madonna and Michelepio Paduano).

- Co-Supervisor of graduate students in Master Science's degree on "Road, Railway, Airport":
  - ✓ (2016) Analisi dei guasti dei mezzi d'opera nelle attività di manutenzione stradale *[Failure analysis of the work vehicles in road maintenance activities]* (Luigi Capuano).

- Co-Supervisor of undergraduate students in Bachelor's degree on "Road, Railway, Airport":
  - ✓ (2016) Modelli Cad 4D per la valutazione di impatto ambientale delle costruzioni stradali *[4D CAD models for the evaluation of environmental impact of road construction]* (Marco Governali);
  - ✓ (2016) Lo standard IFC Alignment per i modelli I-BIM *[The IFC Alignment standard for I-BIM models*] (Alessandra Capano);
  - ✓ (2016) Infrastructure Building Information Modeling I-BIM: stato dell'arte *[Infrastructure Building Information Modeling I-BIM: state of art]* (Fiorella Marone);
  - ✓ (2016) Trasferibilità della procedura HSM per le intersezioni a raso non semaforizzate *[Transferability of the HSM procedure for non-signalized intersections]* (Gaetano Mascetta);
  - ✓ (2016) Interventi di adeguamento delle intersezioni a raso in ambito extraurbano per il miglioramento del livello di servizio *[Road adjustment treatments to improve the level of service on rural roads]* (Emanuela Vetrano);
  - ✓ (2016) Correlazione tra congruenza geometrica e livello di servizio *[Correlation between road geometric design consistency and level of service]* (Domenico Pagliarulo);
  - ✓ (2016) Studio delle procedure di programmazione degli interventi di manutenzione per pavimentazioni stradali di tipo flessibile *[Study of the decision-making procedures of the maintenance operations on the flexible pavements]* (Maria Governo);

- ✓ (2016) Criteri di progettazione geometrico-funzionale di intersezioni stradali a raso: confronto normative e studi di settore *[Geometric-functional design criteria for grade-level intersections: regulations and sector studies comparison]* (Silvia Aurino);
- ✓ (2016) Interventi di adeguamento delle intersezioni a raso in ambito extraurbano per il miglioramento del livello di servizio *[Intersections adapting treatments in rural area to improve the level of service]* (Emanuela Vetrano);
- ✓ (2015) Analisi funzionale e di sicurezza delle infrastrutture stradali in ambito *extraurbano [Level of Service and safety analysis on rural roads]* (Filomena Nastro);
- ✓ (2015) Intersezioni stradali in ambito extraurbano: progettazione geometrica di interventi in base al D.M. 19/04/2006 e valutazione percettiva delle soluzioni *[Rural roads intersection: geometric design adaption in according to D.M. 19/04/2006 and perceptive evaluation of the solutions]* (Rosa Verapalumbo);
- ✓ (2015) Trasferibilità della procedura HSM per le intersezioni a raso non semaforizzate *[Transferability of HSM procedure for non-signalized intersections]* (Gaetano Mascetta);
- ✓ (2014) Valutazione della sicurezza stradale attraverso l'analisi statistica della frequenza degli incidenti in ambito urbano [Road safety evaluation through accident frequency statistical analysis on urban roads] (Claudia Errichiello);
- ✓ (2014) Valutazione dell'efficacia degli interventi di adeguamento di strade extraurbane con il metodo empirico bayesiano *[Evaluation of the maintenance operations' effectiveness on rural roads by empirical Bayesian method]* (Fabio Scarpato).

Teaching Activities at other Universities

- (2024) Lectures on "*BIM for infrastructure: standards and case studies"* (8 hours), Universidad de Las Palmas de Gran Canaria, Las Palmas, Spain, April 22-26, 2024.
- (2023) Lectures on "*BIM for Roads and Railways: State-of-the-Art Review and Practical Aspect"* (8 hours), Polytechnic Institute of Viseu, Portugal, May 2-6, 2023.
- (2023) Lectures on *"Transportation Management & Design using BIM-based tools"* (6 hours) for CEE 327 Transportation Engineering (Instructor: Yinhai Wang), University of Washington, Department of Civil & Environmental Engineering, Seattle (WA), USA.
- (2022) Lecture on *"BIM for Infrastructure"* (4 hours), Ph.D. Course in "Infrastructures and Transport" School in Civil Engineering and Architecture, Rome "La Sapienza" University. On-demand, May 27, 2022.
- (2021) Lecture on *"Building Information Model"* (4 hours), Ph.D. Course in "Infrastructures and Transport" School in Civil Engineering and Architecture, Rome "La Sapienza" University. On-demand, June 10, 2021.
- (2020) Lecture on *"BIM for Road Infrastructures"* (4 hours), Ph.D. Course in "Infrastructures and Transport" School in Civil Engineering and Architecture, Rome "La Sapienza" University. On-demand, May 29, 2020.
- (2020) Lectures on *"Benefits of BIM in Transportation Engineering"* (6 hours), University of Washington, Department of Civil & Environmental Engineering, Seattle (WA), USA.
- (2019) Lecture on *"BIM for Infrastructures"* (2 hours), Second-level Professional Master's Course in InfraBIM Manager, Turin Polytechnic (IT). Torino, June 15, 2019.
- (2019) Lectures on *"I-BIM: practical aspects"* (8 hours), Polytechnic Institute of Viseu, Portugal (PT). Viseu, May 7-11, 2019.

- (2019) Lectures on *"Transportation Safety"* (4 hours), University of Washington, Department of Civil & Environmental Engineering, Seattle (WA), USA. Seattle, January 7-11, 2019.
- (2018) Lectures on *"Building Information Modeling for Infrastructure"* (8 hours) for CEE 412/599, Transportation Data Management and Analysis (Dr. Kristian Henrickson, University of Washington, Department of Civil & Environmental Engineering, Seattle (WA), USA). Seattle, January 14-19, 2018.
- (2017) Lectures on *"Building Information Modeling in Civil Infrastructure Facilities"* (8 hours), Vilnius Gediminas Technical University, Vilnius (LT). Vilnius, September 10-14, 2017.
- (2014) Teaching Assistance for *CEE 424, GIS for Civil Engineers* (Prof. Kamal Ahmed, University of Washington, Department of Civil & Environmental Engineering, Seattle (WA), USA.

Other Teaching and Training Activities

- (2024) **Professor** for "ORIZZONTI" Project - PIANO NAZIONALE DI RIPRESA E RESILIENZA (PNRR) for Active Orientation in the School-University transition, I.S.I.S. Gaetano Filangieri, Frattamaggiore**,** February-March, 2024.
- (2023) Lectures *"Norme funzionali e geometriche per la costruzione delle strade*" [Functional and geometric standards for road construction], UNITRE - Università delle Tre Età – Vico Equense, 1 December, 2023.
- (2023) **Professor** for "ORIZZONTI" Project - PIANO NAZIONALE DI RIPRESA E RESILIENZA (PNRR) for Active Orientation in the School-University transition, I.P.S.E.O.A. Duca di Buonvicino, Napoli, May-June, 2023.
- (2022) NATO Advanced Training Courses *"Monitoring and Protection of Critical Infrastructure by Unmanned Systems"*, NATO. Grant number ATC.G5816. On-demand, June 2, 2022.
- (2021) **Professor** in *"Modellazione Infrastrutturale: Civil 3D"*, BIM Specialist – Professional Training Course, Regione Campania, Virvelle S.r.l., Salerno.
- (2020) **Professor** in *"Modellazione Infrastrutturale: Bentley Open Roads Designer"*, BIM Specialist – Professional Training Course, Regione Campania, Virvelle S.r.l., Salerno.
- (2018-) **Instructor** for Cad Connect Gold Partner of Bentley Systems, Incorporated.

PROFESSIONAL LICENSES AND CERTIFICATIONS

BIM Specialist for Infrastructure	2024	Italy	ICMQ
Bentley Systems	2021	Italy	**Bentley Qualified Trainer** for OpenRoads Designer.
BIM for Infrastructures: Infraworks and Civil 3D	2020	Italy	NKE – Autodesk Platinum Partner Learning Units: 20
Open Rail Designer and Open Rail Concept Station - Core Skills	2018	Italy	Bentley Institute – Certificate of Accomplishment. Learning Units: 4
Basic Training on Open Roads, Power Rail Track, Open Rail Concept Station	2018	Italy	Bentley Institute – Certificate of Accomplishment. Learning Units: 16
How to optimize photogrammetry and laser scanning techniques in civil planning with ContextCapture	2018	Italy	Bentley Institute – Certificate of Accomplishment. Learning Units: 1
Bentley Power Rail Track Basic Training	2017	Italy	Bentley Institute – Certificate of Accomplishment. Learning Units: 16
Road and Site Design (Power Civil) Training	2017	Italy	Bentley Institute – Certificate of Accomplishment. Learning Units: 16
Test of English as a foreign language (TOEFL)	2016	USA	TOEFL iBT, Seattle, February, 2016
Collaborative Institutional Training Initiative (Citi), Basic Program Course in Human Research	2014	USA	Collaborative Institutional Training Initiative (Citi) Basic Program Course in Human Research, Construction Management Department, Seattle, September, 2014
Head of Prevention and Protection in the workplace	2012	Italy	Form C, Standards for Prevention and Protection of health and safety at work, paragraphs 2 and 4, article 8 bis of Legislative Decree no. 626/1994, introduced by Leg. 195/2003, Italy
Italian Professional Engineer License	2012	Italy	Government exam to be licensed as a profession engineer, L. 21/02/1977 N.36, as amended
European Computer Driving License (ECDL)	2002	Italy	ECDL/ICDL syllabus divided into seven modules: Security for IT Users, IT User Fundamentals, Word processing, Spreadsheets, Databases, Presentations, Using Email and the Internet

ADDITIONAL SKILLS

- Bilingual in English and Italian
- Proficient in CAD/GIS/BIM Software (AutoCAD, ArcGIS, Civil Design, Civil 3D, InfraWorks, Power Civil, Power Rail Track, Open Roads Designer, Open Rail Designer, Open Roads Concept Station, Open Rail Concept Station)
- Proficient with Statistical Analysis Software (StatSoft, Stata, SPSS)
- Proficient with Highway Safety Manual, AASHTO Green Book

- Proficient in Microsoft Office Suite (Word, Excel, PowerPoint, Visio)
- Charismatic and Confident Public Speaker

CONTINUING EDUCATION IN THE CIVIL ENGINEERING AREA

- *"*Standard BIM e certificazione aziendale SGBIM UNI 74/2018*",* Webcast ASSOBIM, September 26, 2024.
- *"Coffee Corner: Creazione e Gestione del tracciato"*, Webcast Bentley Systems, March 21, 2024.
- Convention "Italcertifer 3.0. Mercato Globale e Strategie di Diversificazione", Firenze Osmannoro, March 18, 2024.
- *"L'importanza della Certificazione Esperto BIM UNI 11337/7 nel settore della Digitalizzazione AEC"*, Webcast ASSOBIM", October 17, 2023.
- *"BIM e digitalizzazione per la Pubblica Amministrazione alla luce del nuovo Codice degli Appalti*, Webcast ASSOBIM", July 4, 2023.
- *"Novità e punti di forza di Context Capture 23"*, Webcast Cad Connect, July 4, 2023.
- *"Common Data Environment - Cosa sapere sul CDE per il BIM"*, Webcast NTI-NKE, May 25, 2023.
- *"Coffee Corner: OpenRoads (Italia) – Dettagli di Modellazione"*, Webcast Bentley Systems, April 6, 2023.
- *"Intelligenza artificiale, ambiti di applicazione nel trasporto su rotaia"*, Webcast CIFI - Collegio Ingegneri Ferroviari Italiani, March 22, 2023.
- *"Posizionamento di elementi mediante Generative Components ed Information modeling"*, Webcast Bentley Systems, March 2, 2023.
- *"buildingSMART Agenda: Infrastructure Room"*, Webcast Building Smart Italy, March 1, 2023.
- *"Codice Appalti 2023 - Ferrovie, Strade e Impianti Fissi"*, Webcast CIFI, February 28, 2023.
- *"Codice Appalti 2023: nuovi scenari e nuove prospettive sull'obbligo di digitalizzazione"*, Webcast TeamSystem, February 9, 2023.
- *"Coffee Corner: OpenRoads Italiano – Novità ultima versione di OpenRoads & OpenRail Designer"*, Webcast Bentley Systems, November 10, 2022.
- *"L'importanza della gestione e organizzazione delle informazioni in un progetto BIM",* Webcast ASSOBIM, July 14, 2022.
- *"Esempi di Progettazione Ferroviaria con Civil 3D"*, Webcast NKE, July 14, 2022.
- *"La Digitalizzazione dei flussi documentali di commessa BIM: problematiche e soluzioni",* Webcast ASSOBIM, July 12, 2022.
- *"Il flusso BIM-GIS in cloud", Webcast ASSOBIM*, July 7, 2022.
- *"Coffee Corner: OpenRoads Italiano – Federazione dei modelli con iTwin ed integrazione del ciclo di revisione con ORD."*, Webcast Bentley Systems, June 30, 2022.
- Metodologie e strumenti per la digital transformation: dalla progettazione BIM alla gestione del Facility Management, Webcast ASSOBIM, June 16, 2022.
- *"5 consigli per un'implementazione BIM di successo"*, Webcast ASSOBIM, May 5, 2022.
- *"La modellazione di solidi stradali"*, Webcast NKE, May 3, 2022.
- *"Coffee Corner: OpenRoads Italiano – Gestione dei template parte 2: Dal template alla modellazione"*, Webcast Bentley Systems, April 28, 2022.

- *"Integrazione BIM-GIS: a che punto siamo?*", Webcast ASSOBIM, April 21, 2022.
- *"Coffee Corner: OpenRoads Italiano – Gestione dei template"*, Webcast Bentley Systems, March 28, 2022.
- *"Il BIM e Digital Twin: dal cantiere alla gestione dell'asset"*, Webcast ASSOBIM, March 17, 2022.
- *"Infrastructure Project Success Examples Using openBIM"***,** Webcast Building Smart International, March 9, 2022.
- *"Coffee Corner: OpenRoads Italiano – Produzione di Elaborati Dinamici"*, Webcast Bentley Systems, February 28, 2022.
- *"BIM in the US Transportation Industry: Cutting-Edge Projects & Change Mgt",* Webcast HEEP/TRB AED80(1)/buildingSMART USA, February 02, 2022.
- *"La modellazione di intersezioni a raso e a livello sfalsato con Civil 3D"*, Webcast NKE, January 12, 2022.
- *"Il BIM: un contributo decisivo alla sostenibilità delle infrastrutture"*, Webcast UNI, November 4, 2021.
- *"Il BIM 4D e 5D nello sviluppo del progetto e per il controllo di gestione della commessa"*, Webcast ASSOBIM, September 16, 2021.
- "*La progettazione di infrastrutture stradali con IFC*", Webcast SierraSoft, July 28, 2021.
- *"Integrazione tra BIM e GIS attraverso il LOIN"*, Webcast ASSOBIM, July 22, 2021.
- *"Work in BIM: Progettazione, flusso di lavoro e coordinamento per le infrastrutture stradali"*, Webcast SierraSoft, July 21, 2021.
- *"Progettazione stradale con SierraSoft Roads"*, Webcast SierraSoft, July 15, 2021.
- *"Milano: Metodi e tecnologie per la digitalizzazione in ambito ferroviario"*, Webcast CIFI, June 17, 2021.
- *"Synchro la pianificazione BIM 4D"*, Webcast CAD Connect - Bentley Platinum Channel Partner April 13, 2021.
- *"Integrating Building Information Management (BIM) Data with Highway Emergency Response"*, Webcast U.S. Department of Transportation, Federal Highway Administration, April 6, 2021.
- *"Ottimizzare la collaborazione BIM multidisciplinare con OpenBuildings e ProjectWise"*, Webcast CAD Connect - Bentley Platinum Channel Partner, March 10, 2021.
- *"Roads & Highways Design and IFC"*, Webcast Building Smart International, December 9, 2020.
- *"La manutenzione degli impianti di Trazione Elettrica in Rete Ferroviaria Italiana"*, Webcast CIFI - Collegio Ingegneri Ferroviari Italiani – November 30, 2020.
- *"Scan to BIM per le infrastrutture"*, Webcast NKE, October 16, 2020.
- *"Scopri la progettazione ferroviaria BIM"*, Webcast NKE, October 13, 2020.
- *"AEC Collection Essentials:Enhanced Workflows with Project Explorer in Civil 3D"*, Webcast Autodesk, October 6, 2020.
- *"Digital Feedback Loops: How to Track Integrated Engineering Change in AEC Projects Without the Heavy Lift"*, Webcast Building Smart International, September 16, 2020.
- Training courses NKE – Autodesk Platinum Partner:
  - *"BIM per le Infrastrutture – Modulo B: Civil 3D, Sub Assembly e Dynamo per Civil 3D"*, on-demand, July 1-15, 2020.

- *"BIM per le Infrastrutture – Modulo A: Infraworks e Civil 3D"*, On demand, June 10-24, 2020.
- *"Il processo BIM applicato al servizio idrico integrato"*, Webcast Autodesk, April 28, 2020.
- *"Automation and Productivity Gains: A PowerShell Use Case"*, Webcast Bentley Institute, April 23, 2020.
- *"Creating PDFs and iModels for your Design Review"*, Webcast Bentley Institute, April 22, 2020.
- *"Bentley Keynote: ProjectWise Today and Into the Future"*, Webcast Bentley Institute, April 21, 2020.
- *"Uplift Your Project Collaboration with ProjectWise Web and Office 365 Integration"*, Webcast Bentley Institute, April 21, 2020.
- *"Transitioning to the New ProjectWise*, Webcast Bentley Institute, April 21, 2020.
- *"The Fundamentals of ISO 19650 Implementation"*, Webcast Bentley Institute, April 20, 2020.
- *"Digital openBIM Workflows in an Integrated BIM Environment"*, Webcast Building Smart International, April 10, 2020.
- *"Autodesk Civil 3D per la progettazione stradale e la verifica normativa"*, Webcast NKE, December 12, 2019.
- *"Integrazione BIM e GIS con Autodesk e ESRI"*, Webcast NKE, December 10, 2019.
- *"Tech Talk: Using Reality Meshes in OpenRoads Designer"*, Webcast Bentley Institute, August 27, 2019
- *"Strumenti BIM per la progettazione ferroviaria"*, Webcast NKE, June 4, 2019.
- Bentley Connect – Giornata di Studio, Milanofiori, NH Congress Centre, July 2, 2019
- "Assessing the accessibility of new developments". Lecture Prof. A.L. Vasconcelos (Polytechnic Institute of Viseu, Portugal), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", May 23, 2019.
- "Research notes on BIM". Lecture Prof. A. Tibaut (University of Maribor, Slovenia), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", May 22, 2019.
- *"Autodesk Navisworks"*, Webcast NKE, April 18, 2019.
- *"BIM negli appalti: istruzioni per rispondere ad un bando"*, Webcast NKE, March 21, 2019.
- *"SIG Workshop: Bentley Bridge"*, Webcast Bentley Institute, March 14, 2019.
- Training courses Bentley Institute:
  - "Open Roads Designer – Core skills", Università degli Studi di Napoli Federico II, June 28- July 6, 2019.
  - "Naval Architecture Projects", University of Las Palmas De Gran Canaria, March 6-7, 2019.
  - "OpenRail Designer and OpenRail ConceptStation", Università degli Studi di Napoli Federico II, Febraury 25-March 1, 2019.
  - "Open Rail Designer and Open Rail Concept Station – Core skills", Università degli Studi di Napoli Federico II, September 7, 2018.
  - "Rail Design Training", Bentley Systems Italia Srl, Milano, July 26-27, 2018.
  - "Basic Training on Open Roads, Power Rail Track, Open Rail Concept Station", Università degli Studi di Napoli Federico II, March 6-7, 2018.
- *"Leica 3D Laser Scanning Solution".* Lecture Arch. V. Albano (Leica Geosystem), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", December 6, 2018.

- *"Il Pavement Management System*". Lecture Dr. G. Battiato (Rodeco Group), University of Naples "Federico II", December 4, 2018.
- YellowScan Demo Day. Microgeo S.r.l., June 19, 2018.
- The 1st SIIV Winter School 2017 "*Advances in Sustainable Asphalt Pavements*", Moena, Dicembre 17-20, 2017.
- Virtual Bentley Institute Learn Conference for OpenRoads. Couse on Geometry and Civil Cells, Introduction to OpenRoads Designer for GEOPAK, InRoads, and MXROAD Users, 2017.
- *Adeguamento e Costruzione delle Strade: Pratica Amministrativa e Tecnica*. Lecture Eng. Stefano Zampino (AIIT Puglia-Basilicata President), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", December 14, 2017.
- *Bim per le Infrastrutture – Esercitazione Pratica*. Lecture Eng. Salvatore Macrì (Autodesk), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", December 12, 2017.
- *Prodotti e Tecnologie Innovativi ed Ecosostenibili*. Lecture Eng. L. Venturini (Direttore Tecnico di Iterchimica S.r.l.), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", December 12, 2017.
- "*Il Laboratorio – Prove Materiali Stradali dell'Università di Napoli Federico II*". Prof. Francesca Russo, Università degli Studi di Napoli Federico II. Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", December 7, 2017.
- *Soluzioni BIM per le Infrastrtutture*. Lecture Eng. P. Sattamino e R. Redaelli (Harpaceas), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", November 29, 2017.
- *BIM experience in infrastructural large projects: Doha Metro - Al Jadeda Station al Matar B case study*. Lecture Eng.Alfredo Ingletti (3TI Progetti Italia S.p.A.), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", December 15, 2016.
- *Il BIM nel Cantiere AV di Afragola Zaha Hadid Project*. Lecture Eng. Elena Bianconi (BIM Coordinator Astaldi S.p.A), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", December 12, 2016.
- Lecture Eng. Gianfranco Battiato (Rodeco Group), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", December 1, 2016.
- Seminar on *"BIM dal Progetto al cantiere"*. Negroni Key Engineering, Re.work Centro Direzionale Isola E2, Naples, November 22, 2016
- *Tecnica delle Pavimentazioni – Prodotti e CB Innovativi*. Lecture Eng. Loretta Venturini, Direttore Tecnico di Iterchimica S.r.l., Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", November 10, 2016.
- *La manutenzione delle reti stradali: normative, metodi e tecniche e programmi*. Lecture Eng. Stefano Zampino (AIIT Puglia-Basilicata President), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", October 31, 2016
- *Infrastrutture di trasporto locale a guida vincolata*. Lecture Dr. Eng. Giovanni Mantovani (AIIT President), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", March 16, 2016.
- *Low-Cost Underwater and Underground Wireless Communications for Structural Health Monitoring*, Professor Yahong Rosa Zheng (University of Missouri-Columbia), University of Washington, January 29, 2016.

- Ph.D Seminar on *Designing and writing scientific manuscripts for publication in english language scholarly journals, and related topics,* Professor Parker Barnett R. (Pfeiffer University), University of Naples "Federico II" June 15-17, 2015.
- *Gestione delle fasi progettuali nei progetti Design/Build e Construction Manager/General Contractor*. Lecture Professor Giovanni Migliaccio (University of Washington, WA), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico, July 25, 2014.
- Ph.D Seminar on *Advanced Modelling and Simulation of Transportation Networks*, Professor Moshe Ben-Akiva (Institute of Technology, Massachusetts, USA) and Professor Ennio Cascetta (University of Naples Federico II, Italy), University of Naples "Federico II", May 19-23, 2014.
- *Investment Valuation of Public-Private Partnership Transportation Infrastructure Projects*, Lecture Prof. Baabak Ashuri (Georgia Tech University), Department of Civil, Architectural and Environmental Engineering, University of Naples "Federico II", June 13, 2014.
- *Il sistema degli appalti in Campania. Massimo ribasso: criticità, nodi irrisolti e prospettive*. FILCA e CISL. Hotel Ramada, Naples, May 8, 2014.
- Phd Seminar on *Modern Roundabouts – The Basics, The Latest Practices And The System Context Perspective*, Prof. Tomaz Tollazzi (University of Maribor, Slovenia), University of Naples "Federico II", October 15-16, 2013.
- Phd Seminar on *Research & Innovation in the Railway Transport Sector*, Professor Manuel Pereira (Techinical University of Lisbon, Portugal), University of Naples "Federico II", May, 2013
- *Sistemi Informativi Geografici per le Infrastrutture di Trasporto*, Engineering Faculty, University of Naples "Federico II", May 6, 2013.
- Phd Seminar on *Sustainable rural roads management: research, analysis and evaluation*, Prof. Daiva Zilioniene (Vilnius Gediminas Technical University – Lithuania), University of Naples "Federico II", October *1 – 5, 2012.*
- *Wolfram Mathematica Seminario. Mathematica: il software di riferimento per la Didattica, la Ricerca e lo Sviluppo,* University of Naples "Federico II", *July 2012.*
- *Soils in Transportation Infrastructures Design*, Lecture Professor Laureano R. Hoyos - (Department of Civil Engineering, The University of Texas at Arlington), University of Naples "Federico II", June 22, 2012.
- *When Bad Things Happen to Good Projects*. La storia di Monte Pioneer, Lecture Michael T. Long, Chair of AFB30 Transportation Research Board Committee on Low-Volume Roads - Oregon D.O.T, University of Naples "Federico II", May 21, 2012.
- Phd Seminar on *Low-Volume Roads* (Michael T. Long, Chair of AFB30 Transportation Research Board Committee on Low-Volume Roads - Oregon D.O.T), University of Naples "Federico II", May *2 - 5, 2011.*
- *Coordination of traffic signals at urban arterials with traffic adaptive elements*, *Lecture* del Prof. Werner Brilon (Institute for Transportation and Traffic Engineering, Ruhr, University Bochum, Germany), University of Naples "Federico II", April 15, 2011.