

# Europass Curriculum Vitae



## Personal information

First name(s) / Surname(s)

**Filippo Visintainer**

## Work experience

Dates

2005-2024

Occupation or position held

Technology specialist and Project Leader, V2X based ADAS features  
From 2019 Technical Fellow of Cooperative Driver Assistance Systems  
Stellantis-CRF, Trento Branch, SWX

Main activities and responsibilities

As project responsible for Stellantis R&D projects on vehicle-vehicle, vehicle-infrastructure communication (V2X) I led the design, development and testing of V2X-based Advanced Driving Assistance Systems.  
I contributed to the set-up of a V2X reference test site for FCA then Stellantis in Trento on the A22.  
As technical reference for V2X, I supported the design and specifications of new automotive telematic units for next generation vehicles.  
At international level, I have been technical coordinator, test site leader, work package/activity leader and Steering Committee member in EU R&D projects on Cooperative, Connected and Automated Driving (FP6, FP8, H2020, Horizon Europe, CEF). Among the >15 projects: the first V2X pilots SAFESPOT (ended 2010) and DRIVE C2X (2014) and the recent projects on advanced V2X functions for CCAM: Concorda (2021), C-ROADS Italy 1&2 (2023), 5G-CARMEN (2022).  
In these projects, in collaboration with Stellantis-CRF team and partners, I thoroughly tested V2X (IEEE802.11p), C-V2X (LTE PC5 and Uu) and 5G, applied to safety, driving assistance and automated driving applications. I participated to field operational tests on car prototypes in Italy, Austria, Germany, The Netherlands and Sweden.  
As member of the 5G Automotive Association (5GAA) I have been following WG3 on Evaluation, Testbeds and Pilots and previously WG4 on Standards and Spectrum.  
Within standardization of Intelligent Transportation Systems (ITS), I am head of SC3 (ISO/TC 204 and CT525 UNINFO) and GL3 V2V/V2I (ISO/TC 204) in the Italian CUNA Commission "Sistemi e Componenti Elettrici, Elettronici e Telematici installati a bordo veicolo.

Dates

2002-2005

Occupation or position held

Optical Sensor specialist, Microsystems Unit, CRF Trento

Main activities and responsibilities

I was responsible for the optical design in R&D projects on opto-electronic systems for automotive application. I contributed to the development of a sensing system based on CMOS technology for the detection of environmental parameters.

Dates

2001-2022

Occupation or position held

Postgraduate intern

Main activities and responsibilities

Design and development of Opto-electronic sensors and microsystems for automotive.

Name and address of employer

CRF S.C.p.A., Stellantis Group (formerly FCA and FIAT group)

Type of business or sector

Automotive industry

## Education and training

Dates

1995-2001

Title of qualification awarded	M.Sc. Degree in Physics (Old System – Vecchio Ordinamento)
Principal subjects/occupational skills covered	Physics of Matters, Photonics and Optoelectronics, Optical Spectroscopy. Thesis “Vetroceramiche SiO <sub>2</sub> -TiO <sub>2</sub> :Er <sup>3+</sup> per ottica integrata. Produzione per via sol-gel e caratterizzazione ottica, spettroscopica e strutturale”.
Name and type of organisation providing education and training	Università degli Studi di Trento – Facoltà di Scienze Matematiche, Fisiche e Naturali

## Publications

S. Taddei, F. Visintainer, F. Stoffella, F. Biral, Multi-Layered Local Dynamic Map for a Connected and Automated In-Vehicle System, Sustainability, MDPI, vol. 16(3), pages 1-26, 2024.

F. Raviglione; C. M. Risma Carletti; C. Casetti; F. Stoffella; G. M. Yilma, F.Visintainer, S-LDM: Server Local Dynamic Map for Vehicular Enhanced Collective Perception, IEEE 95th Vehicular Technology Conference, 2022.

S. Agriesti, L.Studer, P.Gandini, G.Marchionni, M.Ponti, F. Visintainer, Safety on the Italian Highways: Impacts of the Highway Chauffeur System, Part of the Smart Innovation, Systems and Technologies book series (SIST,volume 149), Springer, 2019.

C. Costa, F. Visintainer, I. Calaon, A new era for traffic management: the C-Roads Italy project and the implementation of C-ITS systems towards automated driving, ITS World Congress, 2019, Singapore.

F. Visintainer, M.Darin, A. Saroldi, L. Andreone, M. Da Lio, Connected Vehicles for Automated Functions: from Enhanced Perception to Negotiated Manoeuvres, 22nd ITS World Congress, 2015.

Andrea Steccanella, Luciano Altomare, Filippo Visintainer Connected vehicles for safer roads, Automotive Torino, 2017.

F. Visintainer , L. Altomare, A. Toffetti a, A. Kovacs b, A. Amditis Towards Manoeuver Negotiation: AutoNet2030 Project from a Car Maker Perspective, Transportation Research Procedia Volume 14, 2016, Pages 2237-2244, Elsevier.

Laurens Hobert, Andreas Festag, Ignacio Llatser, Luciano Altomare, Filippo Visintainer, Andras Kovacs, Enhancements of V2X Communication in Support of Cooperative Autonomous Driving, IEEE Communications Magazine (Volume: 53 , Issue: 12 , Dec. 2015 ), pp. 64 – 70.

F. Visintainer, L. D’Orazio, M. Darin and L. Altomare, “Cooperative Systems in Motorway Environment: The Example of Trento Test Site in Italy”, AAMAA 2013, Lecture Notes in Mobility, Springer 2013, pp 147-158.

L. D’Orazio, F. Visintainer, M. Darin, “Sensor networks on the car: State of the art and future challenges”, Design, Automation & Test in Europe Conference & Exhibition, 14-18 March 2011, Grenoble.

L. Andreone, F.Visintainer, D. Gavrilu, M. Konjin, M. Pieve “Prevention of Road Accidents Involving Vulnerable Road Users: The Outcomes of the Watch-Over Project” , ITS World Congress, 21-25 September 2009, Stockholm.

R. Brignolo,P. Dalmaso, F. Visintainer, G. Zennaro “Cooperative Systems for Road Safety: The SAFESPOT Integrated Project”, Transport Research Arena Europe, 2010, Brussels.

L. Andreone, F. Visintainer, G. Wanielik “Vulnerable Road Users thoroughly addressed in accident prevention: the WATCH-OVER European project”, 14th ITS World Congress, 2007, Beijing.

F.Bonnefoi, F. Bellotti, T. Schendzielorz, F. Visintainer “Safespot applications for Infrastructure-Based Co-Operative Road-Safety”, 14th ITS World Congress, 2007, Beijing.

F. Visintainer, F.Bonnefoi, F. Bellotti, T. Schendzielorz “Infrastructure-based Co-operative Architectures: How SAFESPOT deals with different road network areas”, 14th ITS World Congress, 2007, Beijing.

R. Falciai, G. Fontana, E. Mosca, N. Pallaro, G. Soncini, C. Trono, F. Visintainer, Sistema Rilievo Ostacoli Distribuito, Atti del 4° Workshop Ottiche diffrattive, microottica e microsistemi, 1-2 Aprile 2004, Firenze, pp.42-47.

N. Pallaro, F.Visintainer, M. Darin, E. Mosca, Multifunctional Sensor to Detect Environmental Parameters, Advanced Microsystems for Automotive Applications 2004, Springer Verlag 2004 , pp. 247-265.

- N. Pallaro, F. Visintainer, M. Darin, E. Balocco, E. Borello, M. Gottardi, N. Massari, Multifunctional Sensor to Detect Environmental Parameters, Sensors and Microsystems, Proceeding of the 8th Italian Conference, World Scientific Publishing 2004, pp. 534-539.
- M. Montagna, A. Chiasera, E. Moser, F. Visintainer, M. Ferrari, L. Zampedri, R. R. Gonçalves, S. J. L. Ribeiro, A. Martucci, M. Guglielmi, M. Ivanda, and R. M. Almeida, Nucleation and Crystallization of Titania Nanoparticles in Silica Titania Planar Waveguides: a Study by Low Frequency Raman Scattering, Materials Science Forum Vols. 455-456 (2004) pp. 520-526.
- M. Montagna, E. Moser, F. Visintainer, L. Zampedri, M. Ferrari, A. Martucci, M. Guglielmi, M. Ivanda, Nucleation of Titania Nanocrystals in Silica Titania Waveguides, Journal of Sol-Gel Science and Technology 26 (2003), 241.
- L. Zampedri, F. Visintainer, C. Tosello, S. Ronchin, R. Rolli, M. Montagna, A. Chiasera, G.C. Righini, S. Pelli, A. Monteil, C. Duverger, M. Ferrari, C. Armellini, Erbium-Activated Silica-Titania Planar Waveguides, Journal of Sol-Gel Science and Technology 26 (2003), 1033.

## Patents

- M. Andreetto, P. Postal, M. Darin, N. Poerio, A. Steccanella, F. Visintainer, Automotive cooperative map-free lane-level relative localization based on inter-vehiculare communication, WO2022172146, 2021 (pub. 2022)
- F. Visintainer, A. Steccanella, P. Denti, M. Darin, L. Altomare, A. Marchetto, Automotive driver assistance, WO2020065524, WO2020065525, WO2020065527, 2017(pub. 2020)
- F. Visintainer, L. Altomare, A. Marchetto, Assisting A Motor Vehicle Driver In Negotiating A Roundabout, 2016 (pub. 2019)
- F. Sommariva, F. Lilli, F. Visintainer, E. Betterle, M. Darin, System for detecting vehicle traffic by means of an on-board co-operational telematic platform based upon extended floating car data, US2007208500, EP1816621, 2006 (pub. 2007)
- N. Pallaro, P. Repetto, F. Visintainer, M. Darin, L. Liotti, E. Mosca, Detection device to be installed on a road for detecting environmental conditions and monitoring and controlling traffic, US2005072907, 2003 (pub. 2005)
- N. Pallaro, F. Visintainer, P. Repetto, E. Borello, B. Pairetti, S. Bernard, Multifunctional integrated visual system with CMOS or CCD technology matrix, ITTO20020950, 2022 (pub. 2004)

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Date: 08/05/2024

Signature: 