# **CURRICULUM VITAE**

# Francesco Biondi, PhD

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# 1. APPOINTMENTS

2021 – Present	Associate Professor, Department of Kinesiology, University of Windsor, Windsor, Ontario, Canada
2019 – Present	Adjunct Assistant Professor, Department of Civil Engineering, University of Windsor, Windsor, Ontario, Canada
2019 – Present	Adjunct Assistant Professor, Department of Psychology, University of Utah, Salt Lake City, Utah, USA
2018 - Present	Human Factors Consultant and Expert Witness
2018 – 2021	Assistant Professor, Department of Kinesiology, University of Windsor, Windsor, Ontario, Canada
2016 – 2018	Research Assistant Professor, Department of Psychology, University of Utah, Salt Lake City, Utah, USA
2015 – 2016	HMI Engineer, Jaguar Land Rover, Coventry, England, UK
2. EDUCATION	
2012 – 2015	Doctorate in Psychological Science applied to Human Factors University of Padova, Padova, Italy <b>Dissertation title:</b> Advanced Driver Assistance Systems: Multimodal, redundant warnings enhance road safety
2012 – 2014	Visiting Scholar University of Utah, Salt Lake City, Utah, USA
2009 – 2011	Master of Science in Cognitive Science University of Padova, Padova, Italy <i>Thesis title:</i> "Using the Dual-Task Interference Paradigm to investigate drivers' distraction"
2011	Visiting Erasmus Student KULeuven, Leuven Belgium
2006 – 2009	Bachelor of Science in Experimental Psychology University of Padova, Padova, Italy

#### 3. RESEARCH

#### **Patents**

- 2 Communication control apparatus and method (GB Patent No. GB2558669A), Ayasodo, B., **Biondi, F.**, & Singh, H, Great Britain, Priority Date , Issued, Issue Date January 01, 2020, Patent Number: GB2558669A.
- A virtual assistant for a vehicle which accounts for driver workload (GB Patent No. GB2558671A), Ayasodo, B., **Biondi, F.,** & Singh, H., Great Britain, Priority Date , Issued, Issue Date January 01, 2020, Patent Number: GB2558671A.

#### **Peer-Reviewed Research Publications**

- 47 Lopetrone, E., & **Biondi**, F (2022). On the effect of COVID-19 on drivers' behavior: a survey study. Transportation Research Record.
- Pillai, P., Balasingam. B., Kim, Y. H., Lee, C., & **Biondi**, F (2022). Eye-Gaze Metrics for Cognitive Load Detection on a Driving Simulator, IEEE Transactions on Mechatronics
- Horrey, W. J., Cooper, J. M., Cort, J. A., **Biondi, F,** Strayer, D. L., Horrey, W. J., ... & Brown, S. D. (2021). Erratum to the Special Section: Measuring Cognitive Workload in Human Factors". Human Factors, 63(6), 1125-1125.
- Saberi B., Graff. F., Cort, J., & **Biondi, F** (2021). A Cognitive Workload Toolkit for Ergonomic Professional. Proceedings of the Annual Meeting of the Human Factors and Ergonomics Society.
- Biondi, F, Strayer, D. L., Horrey, W. J., Cooper, J. M., & Cort, J. A. (2021). Preface to the Special Section on Measuring Cognitive Workload in Human Factors. Human Factors, 63(6), 1121-1124.
- 42 **Biondi, F,** & Balasingam, B. (2021). Human Factors of Automated Driving Systems: A Compendium of Lessons Learned. Int J. of Human Factors and Ergonomics
- 41 Ramakrishnan P., Balasingam B., and **Biondi F.** (2021). Cognitive load estimation for adaptive human-machine system automation. In Learning Control: Applications in Robotics and Complex Dynamical Systems, (D. Zhang & B. Wei, ed.), Springer.
- 40 **Biondi, F** (2020). Automation confusion: mental models for safe vehicle adoption. Ergonomics in Design. doi:10.1177/1064804620982711
- Pillai, P., Ayare, P., Balasingam, B., Milne, K., & **Biondi, F** (2020). Response Time and Eye Tracking Datasets for Activities Demanding Varying Cognitive Load. Data in Brief, 33, 106389
- Rossi, M., Gastaldi, M., Orsini, F., **Biondi, F.**, & Mulatti, C. (2020). A driving simulator study exploring the effect of different mental models on ADAS system effectiveness. In: Augmented Reality, Virtual Reality, and Computer Graphics, (L. T. De Paolis & P. Bourdot, ed.), Springer.

- Strayer, D. Getty, **F.Biondi**, J. Cooper (2020). The Multitasking Motorist and the Attention Economy. In: Human Capacity in the Attention Economy, Paul Atchley & Sean Lane. APA publisher.
- Biondi, F. N., Balasingam, B., & Ayare, P. (2020). On the Cost of Detection Response Task Performance on Cognitive Load. Human Factors. https://doi.org/10.1177/0018720820931628
- Biondi, F N., Cacanindin, A., Douglas, C., & Cort, J. (2020). Overloaded and at Work: Investigating the Effect of Cognitive Workload on Assembly Task Performance. Human Factors. https://doi.org/10.1177/0018720820929928
- Campbell, J.L., Tignor, S., **Biondi, F**., Lingham, V. (2020). Meeting the Information Needs of The Road User. Transportation Research Board. Retrieved from http://onlinepubs.trb.org/onlinepubs/centennial/papers/AND20-Final.pdf
- Biondi, FN., Rossi, R., Gastaldi, M., Orsini, F., & Mulatti, C. (2020). Precision teaching to improve drivers' lane maintenance. Journal of Safety Research, 72, 225-229.. doi: 10.1016/j.jsr.2019.12.020 https://doi.org/10.1016/j.jsr.2019.12.020
- Geitner, C., **Biondi, F.**, Skrypchuk, L., Jennings, P., & Birrell, S. (2019). The comparison of auditory, tactile, and multimodal warnings for the effective communication of unexpected events during an automated driving scenario. Transportation Research Part F: Traffic Psychology and Behaviour, 65, 23-33. <a href="https://doi.org/10.1016/j.trf.2019.06.011">https://doi.org/10.1016/j.trf.2019.06.011</a>
- Rossi, R., Gastaldi, M., **Biondi, F**., Orsini, F., De Cet, G., & Mulatti, C. (2019). Effect of driver mental model on ADAS effectiveness: a driving simulator case study. Proceedings of the 2019 Road Safety & Simulation Conference.
- Biondi, FN., Getty, D., Cooper, J.M., & Strayer, D.L. (2019). Examining the effect of infotainment auditory-vocal systems' design components on workload and usability. Transportation research part F: traffic psychology and behaviour 62, 520-528 <a href="https://doi.org/10.1016/j.trf.2019.02.006">https://doi.org/10.1016/j.trf.2019.02.006</a>
- Biondi, F, K. Jeong, & I. Alvarez (2019). Human-System Cooperation in Automated Driving. Int. J. of Human-Machine Interaction, 917-918. https://doi.org/10.1080/10447318.2018.1561793
- Biondi, F, Alvarez, I., & Jeong, K. A. (2019). Human–vehicle cooperation in automated driving: A multidisciplinary review and appraisal. International Journal of Human–Computer Interaction, 35(11), 932-946. https://doi.org/10.1080/10447318.2018.1561792
- Strayer, J. Cooper, R. Goethe, M. McCarty, D. Getty, & **F. Biondi** (2019). Assessing the visual and cognitive demands of in-vehicle information systems. Cognitive Research: Principles and Implications, 4, 18. https://doi.org/10.1186/s41235-019-0166-3
- 26 Strayer, J. Cooper, R. Goethe, M. McCarty, D. Getty, Wheatley, C.L., Motzkus, C. J., Goethe, R.M., F. Biondi, & Horrey, W.J. (2019). Visual and Cognitive Demands of CarPlay, Android

- Auto, and Five Native Infotainment Systems. Human Factors, 61(8), 1371-1386.. https://doi.org/10.1177/0018720819836575
- Biondi, F N., Getty, D., Cooper, J. M., & Strayer, D. L. (2019). Examining the effect of infotainment auditory-vocal systems' design components on workload and usability. Transportation research part F: traffic psychology and behaviour, 62, 520-528. https://doi.org/10.1016/j.trf.2019.02.006
- Biondi, F, Getty, D., McCarty, M., Goethe, R., Cooper, J. M., & Strayer, D. L. (2018). The Challenge of ADAS Assessment: A Scale for the Assessment of the HMI of Advanced Driver Assistance Technology. Transportation Research Record Journal of the Transportation Research Board, 1-38. https://doi.org/10.1177/0361198118773569
- Sanbonmatsu, D. M., Strayer, D. L., Yu, Z., **Biondi, F**, & Cooper, J. M. (2018). Cognitive underpinnings of beliefs and confidence in beliefs about fully automated vehicles. Transportation research part F: traffic psychology and behaviour, 55, 114-122. https://www.sciencedirect.com/science/article/pii/S1369847817307118
- Getty, D., **Biondi, F.**, Morgan, S. D., Cooper, J. M., & Strayer, D. L. (2018). The effects of voice system design components on driver workload. Transportation research record, 2672(37), 94-100., https://doi.org/10.1177/0361198118777382
- Biondi, F., Cooper, J. M., & Strayer, D. L. (2018). Using a User-Independent Approach for Automotive Human–Machine Interface Assessment. SAGE Publications Ltd.
- 20 Strayer, D. L., Cooper, J. M., McCarty, M. M., Getty, D. J., Wheatley, C. L., Motzkus, C. J., ... & **Biondi, F**. (2018). Visual and Cognitive Demands of Using Apple's CarPlay, Google's Android Auto and Five Different OEM Infotainment Systems. AAA Foundation for Traffic Safety. https://aaafoundation.org/visual-cognitive-demands-apples-carplay-googles-android-auto-oem-infotainment-systems
- Wheatley, C. L., Esplin, J., Loveless, S. M., Cooper, J. M., **Biondi, F.**, & Strayer, D. L. (2018, September). Performance and Workload Trends: The Effects of Repeated Exposure to "High" Demand Tasks. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 62, No. 1, pp. 6-10). Sage CA: Los Angeles, CA: SAGE Publications. http://journals.sagepub.com/doi/pdf/10.1177/1541931218621002
- Biondi, F. N., Lohani, M., Hopman, R., Mills, S., Cooper, J. M., & Strayer, D. L. (2018, September). 80 MPH and out-of-the-loop: effects of real-world semi-automated driving on driver workload and arousal. In Proceedings of the human factors and ergonomics society annual meeting (Vol. 62, No. 1, pp. 1878-1882). Sage CA: Los Angeles, CA: SAGE Publications. http://journals.sagepub.com/doi/abs/10.1177/1541931218621427
- Biondi, F., Goethe, R., Cooper, J., & Strayer, D. (2017, July). Partial-autonomous frenzy: Driving a level-2 vehicle on the open road. In International Conference on Engineering Psychology and Cognitive Ergonomics (pp. 329-338). Springer, Cham.https://link.springer.com/chapter/10.1007/978-3-319-58475-1\_25

- Rossi, R., Gecchele, G., Gastaldi, M., **Biondi, F**., & Mulatti, C. (2017, June). An advanced driver assistance system for improving driver ability. Design and test in virtual environment. In 2017 5th IEEE International Conference on Models and Technologies for Intelligent Transportation Systems (MT-ITS) (pp. 509-513). IEEE.IEEE. 10.1109/MTITS.2017.8005725
- Strayer, D. L., **Biondi, F.**, & Cooper, J. M. (2017). Dynamic workload fluctuations in driver/non-driver conversational dyads. Proceedings of the Ninth International Driving Symposium on Human Factors in Driver Assessment. https://ir.uiowa.edu/cgi/viewcontent.cgi?article=1659&context=drivingassessment
- Biondi, F., & Skrypchuk, L. (2017). Use your brain (and light) for innovative human-machine interfaces. In Advances in Human Factors and System Interactions (pp. 99-105). Springer, Cham.
- Biondi, F., Leo, M., Gastaldi, M., Rossi, R., & Mulatti, C. (2017). How to drive drivers nuts: effect of auditory, vibrotactile, and multimodal warnings on perceived urgency, annoyance, and acceptability. Transportation Research Record: Journal of the Transportation Research Board, (2663), 34-39. http://dx.doi.org/10.3141/2663-05
- Strayer, D. L., Cooper, J. M., Goethe, R. M., McCarty, M. M., Getty, D., & **Biondi, F**. (2017). Visual and Cognitive Demands of Using In-Vehicle Infotainment Systems. AAA Foundation for Traffic Safety. http://aaafoundation.org/visual-cognitive-demands-using-vehicle-information-systems/
- Biondi, F. (2017). Driven to Distraction. The Ergonomist. November-December 2017 (pp.12-13)
- Biondi, F., Strayer, D. L., Rossi, R., Gastaldi, M., & Mulatti, C. (2017). Advanced driver assistance systems: Using multimodal redundant warnings to enhance road safety. Applied ergonomics, 58, 238-244. https://doi.org/10.1016/j.apergo.2016.06.016
- 9 Sanbonmatsu, D. M., Strayer, D. L., **Biondi, F.**, Behrends, A. A., & Moore, S. M. (2016). Cellphone use diminishes self-awareness of impaired driving. Psychonomic bulletin & review, 23(2), 617-623. https://link.springer.com/article/10.3758%2Fs13423-015-0922-4
- 8 **Biondi, F.**, Coleman, J. R., Cooper, J. M., & Strayer, D. L. (2016). Average heart rate for driver monitoring systems. International journal of human factors and ergonomics, 4(3-4), 282-291. https://doi.org/10.1504/IJHFE.2016.083521
- Biondi, F., Turrill, J. M., Coleman, J. R., Cooper, J. M., & Strayer, D. L. (2015). Cognitive Distraction Impairs Drivers' Anticipatory Glances: An On-Road Study. Proceedings of the Eight International Driving Symposium on Human Factors in Driver Assessment. https://ir.uiowa.edu/cgi/viewcontent.cgi?article=1546&context=drivingassessment
- 6 Strayer, D. L., Turrill, J., Cooper, J. M., Coleman, J. R., Medeiros-Ward, N., & **Biondi, F**. (2015). Assessing cognitive distraction in the automobile. Human factors, 57(8), 1300-1324. https://doi.org/10.1177/0018720815575149

- Rossi, R., Gastaldi, M., Gecchele, G., **Biondi, F**., & Mulatti, C. (2014). Traffic-Calming Measures Affecting Perceived Speed in Approaching Bends: On-Field Validated Virtual Environment. Transportation Research Record: Journal of the Transportation Research Board, (2434), 35-43. https://doi.org/10.3141/2434-05
- 4 **Biondi, F.**, Rossi, R., Gastaldi, M., & Mulatti, C. (2014). Beeping ADAS: Reflexive effect on drivers' behavior. Transportation research part F: traffic psychology and behaviour, 25, 27-33.
- 3 Strayer, D. L., Cooper, J. M., Turrill, J., Coleman, J., Medeiros-Ward, N., & **Biondi, F**. (2013). Measuring cognitive distraction in the automobile. AAA Foundation for Traffic Safety https://aaafoundation.org/measuring-cognitive-distraction-automobile/
- Rossi, R., Gastaldi, M., **Biondi, F**., & Mulatti, C. (2013). Warning sound to affect perceived speed in approaching roundabouts: Experiments with a driving simulator. Procedia-Social and Behavioral Sciences,. https://doi.org/10.1016/j.sbspro.2013.10.609
- Rossi, R., Gastaldi, M., **Biondi, F**., & Mulatti, C. (2012). Evaluating the impact of processing spoken words on driving: experiments with driving simulator. Transportation Research Record: Journal of the Transportation Research Board, (2321), 66-72. https://doi.org/10.3141/2321-09

#### **Peer-Reviewed Conference Presentations**

- 26 Lopetrone, E., & Biondi, F. (2022). Investigating the Effect of the Covid-19 Pandemic on Drivers Behavior: a Survey Study. Annual Meeting of the Human Factors and Ergonomics Society. October 10-13, 2022, Atlanta, GE, USA
- Pillai, P., Balasingam, B., & **Biondi**, F. (2022). Using Signal-to-Noise ratio to Explore the Cognitive Cost of the Detection Response Task. Annual Meeting of the Human Factors and Ergonomics Society. October 10-13, 2022, Atlanta, GE, USA
- Biondi, F. (2022). On Cognitive Freedom: a Commentary on the Role in Human Factors. Annual Meeting of the Human Factors and Ergonomics Society. October 10-13, 2022, Atlanta, GE, USA
- Saberi, B., & **Biondi**, F. (2021). A Cognitive Workload Toolkit for Ergonomic Professionals. Annual Meeting of the Human Factors and Ergonomics Society. October 10-13, 2021, online
- Pillai, P., Balasingam, B., & **Biondi**, F. (2021). Kalman Filtering to Track Changes in Pupil Size for Automated Driving Systems. IEEE Vehicular Technology Conference (VTC Fall 2021), online.
- Rossi, R., Gastaldi, M., DeCet, M., Mulatti, C., & **Biondi, F**. (2020). A driving simulator study exploring the effect of different mental models on ADAS system effectiveness. SALENTO AVR 2020, Lecce, Italy.
- Biondi, F. (2019). Human-Machine Interface Workshop. TRB Annual Meeting, Washington DC, USA.

- Rossi, R., Gastaldi, M., Orsini, F., , Mulatti, C., & **Biondi, F**. (2019). Improving drivers' lateral control using a precision teaching-based system: A driving simulator study. TRB Annual Meeting, Washington DC, USA.
- Biondi, F. (2019). The Disengaged Driver. TRB Annual Meeting, Washington DC, USA.
- 17 Rossi, R., Gastaldi, M., Orsini, F., Mulatti, C., & **Biondi, F**. (2019). A Precision Teaching-Based System for Enhancing Driver's Control of Vehicle Lateral Variability. TRB Annual Meeting, Washington DC, USA.
- Biondi, F., (2017). HMI in Autonomous Driving. Int. Conf. on Engineering Psychology, Vancouver, BC, Canada
- Geitner, C., Birrell, S., Skrypchuk, L., **Biondi, F**., & Jennings, P. (2017). Research knows best, but how to communicate distraction measures practically in an industrial context. Driver Distraction and Inattention Conference.
- Biondi, F., Coleman, J. R., Cooper, J. M., & Strayer, D. L. (2017). Heart rate detection for driver monitoring systems. TRB Annual Meeting, Washington DC, USA.
- Biondi, F., Leo., M., Gastaldi, M., Rossi, R., & Mulatti, C. (2017). How to drive drivers nuts: effect of auditory, vibrotactile, and multimodal warnings on perceived urgency, annoyance, and acceptability. TRB Annual Meeting, Washington DC, USA.
- Biondi, F. (2016). HMI for Driving Automation. Annual Meeting of the Applied Human Factors and Ergonomics Society. Orlando, FL, USA
- Behrends, A.A., Sanbonmatsu, D.M., Strayer, D.L., **Biondi, F.**, & Moore, S.M. (2015). CellPhone Use Diminishes SelfAwareness of the Adverse Effects of Cell PhoneUse. Annual meeting of the Society for Personality and Social Psychology. Long Beach, CA, USA
- Biondi, F., Strayer, D.L., Dews (2015). Autonomous vehicle: are you aware of them? Conference of Human Factors and Ergonomics Society Europe chapter, Lisbon, Portugal
- 9 **Biondi, F.** (2015). ADAS: redundant warnings speed up drivers' reaction. Conference of Human Factors and Ergonomics Society Europe chapter, Lisbon, Portugal
- 8 **Biondi, F.**, & Strayer, D. (2014). Does cognitive distraction alter the way we anticipate hazards on the roadway? 28th International Congress of Applied Psychology, Paris, France
- Biondi, F., Strayer, D., Rossi, R., Gastaldi, M., & Mulatti, C. (2014). Advanced driver assistance systems: are they really safe? Measuring and reducing the impact of warnings on drivers? distraction. 28th International Congress of Applied Psychology, Paris, France
- R. Rossi, M. Gastaldi,, F. Biondi, C. Mulatti (2014). Effectiveness of traffic calming measures at dangerous intersections: a validation and a simulated study. TRB Annual Meeting, Washington DC, USA.

- Rossi, R., Gastaldi, M., **Biondi, F.**, & Mulatti, C. (2013). Effects on lateral measures in affecting drivers' perceived speed. 4th International Conference on Road Safety and Simulation, Rome, Italy
- 4 Rossi, R., Gastaldi, M., **Biondi, F.**, & Mulatti, C. (2013). Oppel-kundt illusion and lateral optic flow manipulation in affecting perceived speed in approaching roundabouts: experiments with a driving simulator. TRB Annual Meeting, Washington DC, USA.
- Biondi, F. & Mulatti, C. (2012). Stroop: the loneliness of the target (and the distractor). XVIII Congresso nazionale dell'Associazione Italiana di Psicologia, Chieti, Italy
- 2 Rossi, R., Gastaldi, M., **Biondi, F.**, & Mulatti, C. (2013). Warning sound to affect perceived speed in approaching roundabouts: Experiments with a driving simulator. Padova, Italy
- Rossi, M. Gastaldi, F. Biondi, C. Mulatti (2012). Evaluating the impact on driving of the processing of spoken words: Experiments with a driving simulator. TRB Annual Meeting, Washington DC, USA.

#### **Invited Speaker**

- Biondi F. (2022). Cognitive Ergonomics: Developing a toolkit for cognitive load assessment in manufacturing. Atlas Copco's invited speaker series, Sweden
- Biondi F. (2021). Multitasking: The Hidden Connection between Elon Musk's Lies and Zoom Fatigue. Human Kinetics Distinguished Speakers Series, Windsor, Ontario, Canada
- Biondi F., (2021). Physiological Measure Detection for Mental State Monitoring. WESPARK Think Tank
- Biondi F., (2020). The Importance of User Understanding of New Car Feature. iNAGO sponsored webinar
- 11 **Biondi F.**, (2020). Challenges of Autonomous Driving. Online Webinar
- Biondi F. (2019). Attention economy in a multitasking world. Windsor-Essex Ergonomics Working Group's Speaker Series
- 9 **Biondi, F**. (2019). New HMI, Old Challenges A New HMI Assessment for Modern In-Vehicle Technology. Car HMI:UX Redefined, Detroit, MI, USA
- 8 **Biondi F**. (2018). The Human Factors in Autonomous Driving. The Cross-Border Institute's Speaker Series
- 7 **Biondi F**. (2017). Bringing the User Back into the Equation. Write the Docs & Utah Product Designer Association.

- 6 **Biondi, F.** (2017). Fatigue and Distraction Monitoring Systems for Autonomous Vehicles. Car HMI:UX Redefined, Detroit, MI, USA
- 5 **Biondi, F**. (2017). The Surprising Distraction Potential of New Vehicle Interfaces. Annual Distracted Driving Summit, Norfolk, VA, USA
- 4 **Biondi, F.** (2017). Taking the user out of the equation: A toolkit for user-independent assessments of automotive HMI. Car HMI:UX Redefined, Detroit, MI, USA
- 3 **Biondi F**. (2017). Human Interaction with Automated Vehicles. Utah State Legislators Symposium on Automated Vehicles, Logan, UT, USA
- **Biondi F**. (2015). Who's driving the selfdriving car and what for? Jaguar Land Rover Research Conference, Coventry, UK
- Biondi F. (2015). Multimodal warnings: what, when and why? Jaguar Land Rover Research Conference, Coventry, UK

#### **Media Presentations**

- 22 Risks of self-driving cars, 630 CHED in Edmonton, 2022
- Drivers of self-driving cars can rely too much on autopilot, and that's a recipe for disaster. The Conversation, 2022
- 20 COVID-19 and crash risk. AM 800 Dan MacDonald Show, 2022.
- 19 Driving behaviour deteriorated during COVID pandemic, study shows, Windsor Star, 2022
- Smart devices can now read your mood and mind, leading to a new set of concerns about technology and consent, The Conversation, 2022
- Dream of autonomous vehicles crashes into reality of driving challenges, Windsor Star, 2021.
- Why we still dont have self-driving cars on the roads in 2021, Radio interview on the Shaye Ganam Show on 630 CHED radio in Edmonton and 770 CHQR, 2021.
- 15 COVID-19 has fuelled automation but human involvement is still essential, The Conversation, 2021.
- 14 The Morning News, Calgary AB, The COVID-19 push for more automation, 2021.
- Zoom fatigue and distracted driving share a common problem: Multitasking, The Conversation, 2021,
- The Conversation, Zoom fatigue and distracted driving share a common problem, The Conversation, 2021

- 11 The road to driverless cars is looking hopeless, Deseret News, 2021
- When it comes to automated driving, passenger vehicles may take a backseat to freight transport, The Globe and Mail, 2021
- 9 Uwindsor profs study how people relate to "driver assist" systems, CTV, 2020.
- Whos to blame when a self-driving car has an accident?, The Conversation, 2020
- PRWeb, iNAGO Corporation and ABC Technologies Announce Partnership to Create a Fully Interactive and "Intelligent" In-Car Experience, TORONTO, 2020
- 6 A user's guide to self-driving cars, National Post, 2019
- 5 AUTO CAR COGNITION, CBC Radio, 2019
- 4 Human-centred design can help reduce accidents like the recent Ethiopian Airlines Boeing 737, National Post, 2019
- 3 UWindsor researchers studying potential dangers of semi-autonomous cars, CBC, 2019
- 2 Self-driving cars are coming, but not soon enough, Deseret News, 2018
- 1 Hands-free talking and texting are unsafe for drivers, study shows, Science Daily, 2013,

#### 4. GRANTS AND AWARDS

2022 – 2025	NSERC Discovery Grant. Drivers' cognitive load detection through ocular metrics classification for the development on Driver Monitoring Systems. PI: Francesco Biondi
2022	UWindsor Internal Funds. Purchasing of a 2022 Tesla Model 3 for Research Purposes. PI: Francesco Biondi
2021 – 2022	WE-SPARK Health Institute. Developing A Machine Vision Eye- Blink Detection Application For The Monitoring Of Zoom Fatigue. PI: Francesco Biondi,
2021 – 2022	SSHRC PEG. Translating Atlas Copco's Cognitive Ergonomics Toolkit For Remote Cognitive Load Assessments PI: Francesco Biondi
2021 – 2022	Mitacs. Low Cost Eye-Tracking Data Analytic System for Vision Therapy. Co-PI: Francesco Biondi
2021 – 2022	CRE-MSD. The Effect of Visual Workload on Cognitive Load and Physical Performance in a Simulated Manufacturing. PI: Francesco Biondi

2020 – 2022	UWindsor Xcelerate Program. Data Fusion Strategies for Improved Human Computer Interaction in Autonomous Systems. Co-PI: Francesco Biondi
2020 – 2022	Ontario Ministry of Transportation. Real-World ADAS Assessment. PI: Francesco Biondi
2020	Development and Assessment of Cognitive Workload Toolkit for Atlas Copco Operators in Manufacturing. PI: Francesco Biondi
2020	UWindsor SSHRC Explore Grant. Exploring the effect of increasing cognitive workload on work-related physical performance. PI: Francesco Biondi
2020	Ontario Center of Excellence. User Testing of iNAGO's Smart Cockpit. PI: Francesco Biondi
2020	NATO Innovation Hub. Innovation Challenge., Co-Investigator: Francesco Biondi
2019 – 2022	SSHRC IDV. Effect of partially automated driving on driver cognitive load: developing warning strategies to minimize collision risk. PI: Francesco Biondi
2019	Ontario Center of Excellence. User Testing of iNAGO's Automotive Assistant. PI: Francesco Biondi
2019	AAA Foundation for Traffic Safety (sub-contract). Evaluation of Partially-Automated Vehicles. PI: Francesco Biondi
2016 – 2018	AAA Foundation for Traffic Safety. Evaluation of Cognitive and Visual Workload in Vehicles. Co-Investigator: Francesco Biondi
2016 – 2018	University of Utah Foundation, Spectral EEG and Driver Physiology to Monitor Driver Mind-Wandering, PI: Francesco Biondi
2015 – 2016	EPSRC iCASE, Haptic Interfaces for Autonomous Vehicles, PI: Francesco Biondi

## Awards and distinctions

2016 Frank Ely Best Paper of the Year Award Human Factors and Ergonomics Society

2015 Europe Young Researcher Award

# Human Factors and Ergonomics Society European Chapter

# 2012 Best Young Researcher *Italian Association of Psychology*

#### 5. TEACHING EXPERIENCE

## **Courses Taught**

# Undergraduate Level

2022 - Present	Measurement and Evaluation, University of Windsor
2019 – Present	User Experience for Ergonomics, University of Windsor
2019 – Present	Cognitive Ergonomics, University of Windsor
2019	Neuroscience for Ergonomics, University of Windsor
2019	Human Factors and Work Performance, University of Windsor
2017	Cognitive Psychology, University of Utah
2017	Human Factors and Ergonomics, University of Utah
Graduate level	
2021 – Present Quanti	tative Analysis in Kinesiology, University of Windsor

## 6. PROFESSIONAL SERVICE & MEMBERSHIPS

# **Grants/Scholarship Evaluation**

National Science Foundation US (Expert panelist)

2020 - Present RStudio for Experimental Research, University of Windsor

#### **Editorial Services**

2022 – Present	Editorial Board Member of the Special Issue on the Human Factors of Driver Monitoring Systems of the Journal Human Factors
2020 – Present	Associate Editor of the journal Transportation Research Record

2019 – Present	Associate Editor of the Int. Journal of Human Factors and Ergonomics
2018 – 2021	Editorial Board Member of the Special Issue on Cognitive Workload Assessment of the Journal Human Factors
2017 – 2019	Associate Editor of the Special Issue on Autonomous Driving of the International Journal of Human-Computer Interaction

# Scientific Advisory Board

2022 – Present	Committee Member of the TRB Standing Committee on Human Factors of Vehicles — ACH30
2022 - Present	Co-organizer of the AutoUI Conference
2020 – Present	Committee member of Safety and Human Factors Standards Steering Committee - Society of Automotive Engineers
2020 – Present	Committee member of SAE Driving Automation Systems Committee (TEVSHF4)
2020 - Present	Member of the Partners for Automated Vehicle Education (PAVE)
2020 - Present	Member of the Standards Council of Canada. ISO/TC TC22 SC39. Ergonomics
2019	Board member of the International Conference on Driver Distraction and Inattention
2019	Co-organizer of the TRB Workshop of Autonomous Driving
<ul><li>2019</li><li>2019</li></ul>	Co-organizer of the TRB Workshop of Autonomous Driving  Editorial Board Member of the 10th International Driving Symposium
2019	Editorial Board Member of the 10th International Driving Symposium  Committee Member of the TRB ANB50 committee on Alcohol, Other Drugs,
2019 2018 – 2022	Editorial Board Member of the 10th International Driving Symposium  Committee Member of the TRB ANB50 committee on Alcohol, Other Drugs, and Transportation
2019 2018 – 2022 2018 – Present	Editorial Board Member of the 10th International Driving Symposium  Committee Member of the TRB ANB50 committee on Alcohol, Other Drugs, and Transportation  Committee member of the Windsor-Essex Road Safety Working Group  Committee Member of the TRB ACH40 committee on Human Factors of
2019 2018 – 2022 2018 – Present 2018 – Present	Editorial Board Member of the 10th International Driving Symposium  Committee Member of the TRB ANB50 committee on Alcohol, Other Drugs, and Transportation  Committee member of the Windsor-Essex Road Safety Working Group  Committee Member of the TRB ACH40 committee on Human Factors of Infrastructure Design

2016 Co-organizer of the annual meeting of the Applied Human Factors and

Ergonomics Society

# **Reviewer for Peer-Reviewed Publications**

2018 – Present	Applied Ergonomics
2017 – Present	Human Factors
2017 – Present	Int. Journal of Human-Computer Interaction
2017 – Present	Journal of Advanced Transportation
2016 – Present	Journal of Cognitive Engineering and Decision Making
2016 - Present	Accident Analysis and Prevention
2016 – Present	Transportation Research Part F