

Pavlo Bazilinsky

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Work experience:

2022–present	<i>TU Eindhoven</i> (Netherlands)	Assistant professor in the Computation Design Systems cluster of the Industrial Design department, focusing on AI-driven interaction between automated vehicles and other road users.
2018–2022	<i>TU Delft</i> (Netherlands)	Postdoctoral researcher in VIDI project of Joost de Winter "How should automated vehicles communicate with other road users?". Focus on communication between automated vehicles and vulnerable road users. Developed open-source coupled simulator .
2018–2021	<i>NEXTdriver</i> (Netherlands)	Director of data science research. Startup with a focus on Safety as a Service in mobility in YES!Delft incubator ecosystem. Managed projects with big data on traffic behaviour in the Netherlands. Led development of an AI-based vision sensor.
2011–2014	<i>OneHourTranslation.com</i> , freelance	Freelance translations and localisations. Languages: English, Russian, Ukrainian. More than 7,000 projects, 4.9/5.0 rating, reviewer status, preferred translator of a number of international companies.
2011–2012	<i>Cluetail</i> (Finland), trainee	Part of the eleet.fi team, which was selected to the finals of the 'Uutisraivaaja' innovation contest. Web design and programming using Apache Wicket framework.
2010–2011	<i>MHG Systems</i> (Finland), trainee	Developed 'MHG Public' module. Resulted in increased revenue and improved customer service. Localisation (into Ukrainian and Russian) and internalisation of software products.

Education:

2014–2018	<i>TU Delft</i> (Netherlands)	PhD in Human Factors of Automated Driving: Auditory Interface Marie Curie ITN fellow within HFAuto : large European project aimed to generate knowledge on human factors of automated driving towards safer road transportation (15 partners, 13 PhDs and 1 post-doc).
2012–2014	<i>University of St Andrews</i> (Scotland) and <i>Maynooth University</i> (Ireland)	Erasmus Mundus Double MSc in Dependable Software Systems 1 st year specialisation–AI, 2 nd year–Rigorous Software Development. GPA–17.8/20.0, double distinction. Scholarship B. Class representative for MSc Computer Science students of the University of St Andrews, 2012–2013.
2009–2012	<i>South-Eastern Finland University of Applied Sciences</i> (Finland)	BEng in Information Technology. Software Development 5, Networking 5, Telecommunications 4. 278 ECTS. GPA–4.5/5.0. Microsoft Student Partner 2011–2012.
2011–2012	<i>University of Wolverhampton</i> (England)	<i>Exchange abroad in Computer Science.</i> Databases A, HPC A, Games Development B. GPA–A14/A16. ERASMUS Scholarship.
2008–2009	<i>National University of 'Kyiv-Mohyla Academy'</i> (Ukraine)	BSc in Computer Science , 1st year. Mathematics 91, Physics 100, Algorithms and Data Structures 81. GPA–93/100.

Research visits:

7.2015	<i>EPFL</i> (Switzerland)	Collaboration with VITA group and Prof. Alexandre Alahi. Resulted in publication [67].
1.2025	<i>Uppsala University</i> (Sweden)	Collaboration with Cyber-Physical Systems lab.
10–12.2019	<i>Nissan</i> (Japan)	On-road experiment on perception of automated driving by pedestrians. Resulted in publication [25].

11–12.2017	<i>Virginia Tech Transportation Institute (USA)</i>	Analysis of data on communication between pedestrians and drivers of manually-driven cars in USA.
05–06.2017	<i>Volvo Trucks (Sweden)</i>	On-road experiment on auditory in-vehicle feedback for automated trucks. Resulted in publication [15].
04–06.2016	<i>Continental (Germany)</i>	Developing methodology for designing and verification of auditory assets for automotive industry. Resulted in publication [22].
04–06.2015	<i>TU München (Germany)</i>	Simulator experiment on multimodal feedback for take-over requests for automated driving. Resulted in publication [9].

Academic activities:

2022–present	<i>TU Eindhoven (Netherlands)</i>	Since 2024, a core member of Open Science Community Eindhoven (OSC/e , 0.1 FTE). Since 2025, a member of the TU Eindhoven Young Academy of Engineering (EYAE). Since 2025, an FAISI associate.
2014–2022	<i>TU Delft (Netherlands)</i>	Data champion of 3mE faculty (2019–present, sharing knowledge about data management and open data/science in the faculty). Member of PhD Council of 3mE faculty (2015–2018). Member of Research Council of HFAuto (2014–2017). Participant of Open Cloud for Research Environments (OCRE, 2019–participant).
2015–present	<i>Marie Curie Alumni Association (MCAA, international)</i>	Association of alumni of Marie Skłodowska-Curie actions programmes with 21,000 members. Chair (2015–2017) and vice-chair (2017–2019) of BeNeLux chapter BeNeLux chapter , chair (2017–2021) and vice-chair (2021–2022) of Bridging Science and Academia working group , treasurer (2022–present).
2013–present	<i>Erasmus Mundus Students and Alumni Association (EMA, international)</i>	Association of alumni of Erasmus Mundus programmes with 15,000 members. Global course representative (2013–2014 and 2017–2018), member of Communications and Funding teams (2017–2018), member of board of Eurasian chapter (2017–2019), quantitative analyst of Course Quality Advisory Board (2017–2018), member of Capacity building task force of ESAA (Erasmus+ Student and Alumni Alliance, 2018–2019). Director of research and innovation of EMA (2019–2021).

Publications (all published versions and preprints are open access): <https://bazilinskyy.github.io/publications>

1. Jeon, M., **Bazilinskyy, P.**, Hammerschmidt, J., Hermann, T., Landry, S., & Wolf, K. E. (2015). Report on the in-vehicle auditory interactions workshop: taxonomy, challenges, and approaches. In *Proceedings of AutomotiveUI*. Graz, Austria. <https://pub.uni-bielefeld.de/record/2775049>
2. **Bazilinskyy, P.**, Kyriakidis, M., & De Winter, J. C. F. (2015). An international crowdsourcing study into people's statements on fully automated driving. In *Proceedings of Applied Human Factors and Ergonomics (AHFE)*. Las Vegas, USA. <https://doi.org/10.1016/j.promfg.2015.07.540>
3. **Bazilinskyy, P.**, & De Winter, J. C. F. (2015). Auditory interfaces in automated driving: an international survey. *PeerJ Computer Science*, 1, e13. <https://doi.org/10.7717/peerj-cs.13>
4. **Bazilinskyy, P.**, Geest, L. Van Der, Van Leeuwen, S., Numan, B., Pijnacker, J., & De Winter, J. C. F. (2016). Blind driving by means of auditory feedback. In *Proceedings of 13th IFAC/IFIP/IFORS/IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems*. Kyoto, Japan. <https://doi.org/10.1016/j.ifacol.2016.10.612>
5. **Bazilinskyy, P.**, Van Haarlem, W., Quraishi, H., Berssenbrugge, C., Binda, J., & De Winter, J. C. F. (2016). Sonifying the location of an object: A comparison of three methods. In *Proceedings of 13th IFAC/IFIP/IFORS/IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems*. Kyoto, Japan. <https://doi.org/10.1016/j.ifacol.2016.10.614>
6. **Bazilinskyy, P.**, Kováčsová, N., Al Jawahiri, A., Kapel, P., Mulckhuyse, J., Wagenaar, S., & De Winter, J. C. F. (2016). Object-alignment performance in a head-mounted display versus a monitor. In *Proceedings of IEEE International Conference on Systems, Man, and Cybernetics (SMC)*. Budapest, Hungary. <https://research.tudelft.nl/en/publications/object-alignment-performance-in-a-head-mounted-display-versus-a-m>
7. **Bazilinskyy, P.**, Eriksson, A., Petermeijer, S. M., & De Winter, J. C. F. (2017). Usefulness and satisfaction of take-over requests for highly automated driving. In *Proceedings of Road Safety and Simulation (RSS)*. The Hague, The

- Netherlands. <https://research.tudelft.nl/en/publications/usefulness-and-satisfaction-of-take-over-requests-for-highly-auto>
8. **Bazilinskyy, P.**, Beaumont, C. J. A. M., Geest, X. O. S. van der, Jonge, R. F. de, Kroft, K. van der, & De Winter, J. C. F. (2017). Blind driving by means of a steering-based predictor algorithm. In *Proceedings of Applied Human Factors and Ergonomics (AHFE)*. Los Angeles, USA. <https://research.tudelft.nl/en/publications/blind-driving-by-means-of-a-steering-based-predictor-algorithm>
 9. Petermeijer, S. M., **Bazilinskyy, P.***, Bengler, K., & De Winter, J. C. F. (2017). Take-over again: Investigating multimodal and directional TORs to get the driver back into the loop. *Applied Ergonomics*, 62, 204–215. <https://doi.org/10.1016/j.apergo.2017.02.023>
 10. **Bazilinskyy, P.**, & De Winter, J. C. F. (2017). Analyzing crowdsourced ratings of speech-based take-over requests for automated driving. *Applied Ergonomics*, 64, 56–64. <https://doi.org/10.1016/j.apergo.2017.05.001>
 11. **Bazilinskyy, P.**, Van der Aa, A., Schoustra, M., Spruit, J., Staats, L., Van der Vlist, K. J., & De Winter, J. C. F. (2018). An auditory dataset of passing vehicles recorded with a smartphone. In *Proceedings of Tools and Methods of Competitive Engineering (TMCE)*. Las Palmas de Gran Canaria, Spain. <https://research.tudelft.nl/en/publications/an-auditory-dataset-of-passing-vehicles-recorded-with-a-smartphon>
 12. **Bazilinskyy, P.**, Heisterkamp, N., Luik, P., Klevering, S., Haddou, A., Zult, M., Dialynas, G., Dodou, D., & De Winter, J. C. F. (2018). Eye movements while cycling in GTA V. In *Proceedings of Tools and Methods of Competitive Engineering (TMCE)*. Las Palmas de Gran Canaria, Spain. <https://research.tudelft.nl/en/publications/eye-movements-while-cycling-in-gta-v>
 13. **Bazilinskyy, P.**, Petermeijer, S. M., Petrovych, V., Dodou, D., & De Winter, J. C. F. (2018). Take-over requests in highly automated driving: A crowdsourcing survey on auditory, vibrotactile, and visual displays. *Transportation Research Part F: Traffic Psychology and Behaviour*, 56, 82–98. <https://doi.org/10.1016/j.trf.2018.04.001>
 14. **Bazilinskyy, P.**, Cieler, S., & De Winter, J. C. F. (2018). Sound design process for automotive industry. Preprint. https://www.researchgate.net/publication/325846614_Sound_design_process_for_the_automotive_industry
 15. **Bazilinskyy, P.**, & De Winter, J. C. F. (2018). Crowdsourced measurement of reaction times to audiovisual stimuli with various degrees of asynchrony. *Human Factors*, 60, 1192–1206. <https://doi.org/10.1177/0018720818787126>
 16. **Bazilinskyy, P.**, Larsson, P., Johansson, E., & De Winter, J. C. F. (2019). Continuous auditory feedback on the status of adaptive cruise control, lane deviation, and time headway: An acceptable support for truck drivers? *Acoustical Science and Technology*, 40, 382–390. <https://doi.org/10.1250/ast.40.382>
 17. **Bazilinskyy, P.**, Bijker, L., Dielissen, T., French, S., Mooijman, T., Peters, L., & De Winter, J. C. F. (2019). Blind driving by means of the track angle error. In *Proceedings of International Congress on Sound and Vibration (ICSV)*. Montreal, Canada. <https://research.tudelft.nl/en/publications/blind-driving-by-means-of-the-track-angle-error>
 18. **Bazilinskyy, P.**, Kyriakidis, M., & De Winter, J. C. F. (2019). When will most cars drive fully automatically? An analysis of international surveys. *Transportation Research Part F: Traffic Psychology and Behaviour*, 64, 184–195. <https://research.tudelft.nl/en/publications/when-will-most-cars-be-able-to-drive-fully-automatically-projecti>
 19. **Bazilinskyy, P.**, Dodou, D., & De Winter, J. C. F. (2019). Survey on eHMI concepts: The effect of text, color, and perspective. *Transportation Research Part F: Traffic Psychology and Behaviour*, 67, 175–194. <https://research.tudelft.nl/en/publications/survey-on-ehmi-concepts-the-effect-of-text-color-and-perspective>
 20. **Bazilinskyy, P.**, Kooijman, L.*, & De Winter, J. C. F. (2020). Coupled simulator for research on the interaction between pedestrians and (automated) vehicles. In *Proceedings of Driving Simulation Conference (DSC)*. Antibes, France. <https://research.tudelft.nl/en/publications/coupled-simulator-for-research-on-the-interaction-between-pestr>
 21. **Bazilinskyy, P.**, Dodou, D., & De Winter, J. C. F. (2020). External Human-Machine Interfaces: Which of 729 colors is best for signaling ‘Please (do not) Cross’? In *Proceedings of IEEE International Conference on Systems, Man, and Cybernetics (SMC)*. Toronto, Canada. <https://doi.org/10.1109/SMC42975.2020.9282998>
 22. **Bazilinskyy, P.**, Eisma, Y. B., Dodou, D., & De Winter, J. C. F. (2020). Risk perception: A study using dashcam videos and participants from different world regions. *Traffic Injury Prevention*, 21, 347–353. <https://doi.org/10.1080/15389588.2020.1762871>
 23. **Bazilinskyy, P.**, Kooijman, L., Dodou, D., & De Winter, J. C. F. (2021). How should external Human-Machine Interfaces behave? Examining the effects of colour, position, message, activation distance, vehicle yielding, and visual distraction among 1,434 participants. *Applied Ergonomics*, 95, 103450. <https://doi.org/10.1016/j.apergo.2021.103450>
 24. **Bazilinskyy, P.**, Sakuma, T., & De Winter, J. C. F. (2021). What driving style makes pedestrians think a passing vehicle is driving automatically?. *Applied Ergonomics*, 95, 103428. <https://doi.org/10.1016/j.apergo.2021.103428>
 25. Onkhar, V., **Bazilinskyy, P.**, Stapel, J. C. J., Dodou, D., Gavrila, D., & De Winter, J. C. F. (2021). Towards the detection of driver–pedestrian eye contact. *Pervasive and Mobile Computing*, 76, 101455. <https://doi.org/10.1016/j.pmcj.2021.101455>

26. De Winter, J. C. F., **Bazilinskyy, P.**, Wesdorp, D., De Vlam, V., Hopmans, B., Visscher, J., & Dodou, D. (2021). How do pedestrians distribute their visual attention when walking through a parking garage? An eye-tracking study. *Ergonomics*, 64, 793–805. <https://doi.org/10.1080/00140139.2020.1862310>
27. Sripada, A., **Bazilinskyy, P.**, & De Winter, J. C. F. (2021). Automated vehicles that communicate implicitly: examining the use of lateral position within the lane. *Ergonomics*, 1–13. <https://doi.org/10.1080/00140139.2021.1925353>
28. **Bazilinskyy, P.**, Dodou, D., & De Winter, J. C. F. (2021). Visual attention of pedestrians in traffic scenes: A crowdsourcing experiment. In *Proceedings of International Conference on Applied Human Factors and Ergonomics (AHFE)*. <https://research.tudelft.nl/en/publications/visual-attention-of-pedestrians-in-traffic-scenes-a-crowdsourcing>
29. Oudshoorn, M. P. J., De Winter, J. C. F., **Bazilinskyy, P.**, & Dodou, D. (2021). Bio-inspired intent communication for automated vehicles. *Transportation Research Part F: Traffic Psychology and Behaviour*, 80, 127–140. <https://doi.org/10.1016/j.trf.2021.03.021>
30. Onkhar, V., **Bazilinskyy, P.**, Dodou, D., & De Winter, J. C. F. (2022). The effect of drivers' eye contact on pedestrians' perceived safety. *Transportation Research Part F: Traffic Psychology and Behaviour*, 84, 194–210. <https://doi.org/10.1016/j.trf.2021.10.017>
31. **Bazilinskyy, P.**, Dodou, D., & De Winter, J. C. F. (2022). Crowdsourced assessment of 227 text-based eHMIs for a crossing scenario. In *Proceedings of Applied Human Factors and Ergonomics (AHFE)*. New York, USA. <https://doi.org/10.54941/ahfe1002444>
32. Driessen, T., Prasad, L., **Bazilinskyy, P.**, & De Winter, J. C. F. (2022). Identifying lane changes automatically using the GPS sensors of portable devices. In *Proceedings of Applied Human Factors and Ergonomics (AHFE)*. New York, USA. <http://doi.org/10.54941/ahfe1002433>
33. **Bazilinskyy, P.**, Dodou, D., Eisma, Y. B., Vlakveld, W. V., & De Winter, J. C. F. (2022). Blinded windows and empty driver seats: The effects of automated vehicle characteristics on cyclist decision-making. *IET Intelligent Transportation Systems*, 17, 72–84. <https://doi.org/10.1049/itr2.12235>
34. Mok, C. S., **Bazilinskyy, P.**, & De Winter, J. C. F. (2022). Stopping by looking: A driver-pedestrian interaction study in a coupled simulator using head-mounted displays with eye-tracking. *Applied Ergonomics*, 105, 103825. <https://doi.org/10.1016/j.apergo.2022.103825>
35. **Bazilinskyy, P.**, Kooijman, L., Dodou, D., Mallant, K. P. T., Roosens, V. E. R., Middelweerd, M. D. L. M., Overbeek, L. D., & De Winter, J. C. F. (2022). Get out of the way! Examining eHMIs in critical driver-pedestrian encounters in a coupled simulator? In *Proceedings of International ACM Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Seoul, South Korea. <https://doi.org/10.1145/3543174.3546849>
36. **Bazilinskyy, P.**, Merino-Martinez, R., Vieirac, E. O., & De Winter, J. C. F. (2023). Exterior sounds for electric and automated vehicles: Loud is effective. *Applied Acoustics*, 214, 109673. <https://doi.org/10.1016/j.apacoust.2023.109673>
37. De Winter, J. C. F., Hoogmoed, J., Stapel, J., Dodou, D., & **Bazilinskyy, P.** (2023). Predicting perceived risk of traffic scenes using computer vision. *Transportation Research Part F: Traffic Psychology and Behaviour*, 93, 35–247. <https://doi.org/10.1016/j.trf.2023.01.014>
38. Ebel, P., **Bazilinskyy, P.**, Hwang, A., Ju, W., Sandhaus, H., Srinivasan, A., Yang, Q., & Wintersberger, P. (2023). Breaking barriers: Workshop on open data practices in AutoUI research. In *Proceedings of the 15th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Ingolstadt, Germany. <https://doi.org/10.1145/3581961.3609835>
39. Dong, H., Tran, T., **Bazilinskyy, P.**, Hoggenmueller, M., Dey, D., Cazacu, S., Franssen, M., & Gao, R. (2023). Holistic HMI design for automated vehicles: Bridging in-vehicle and external communication. In *Proceedings of the 15th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Ingolstadt, Germany. <https://doi.org/10.1145/3581961.3609837>
40. Verstegen, J., & **Bazilinskyy, P.** (2024). Slideo: Using bicycle-to-vehicle communication to intuitively share intentions to automated vehicles. In *Proceedings of Applied Human Factors and Ergonomics (AHFE)*. Nice, France. <http://doi.org/10.54941/ahfe1005210>
41. Verstegen, R., Gao, R., Bernhaupt, R., **Bazilinskyy, P.**, & Martens, M. (2024). Combining internal and external communication: The design of a holistic Human-Machine Interface for automated vehicles. In *Proceedings of Applied Human Factors and Ergonomics (AHFE)*. Nice, France. <https://doi.org/10.54941/ahfe1005205>
42. Franssen, M., Verstegen, R., **Bazilinskyy, P.**, & Martens, M. (2024). Exploring the correlation between emotions and uncertainty in daily travel. In *Proceedings of Applied Human Factors and Ergonomics (AHFE)*. Nice, France. <https://doi.org/10.54941/ahfe1005244>
43. Dong, H., Tran, T., Verstegen, R., Cazacu, S., Hoggenmüller, M., Dey, D., Franssen, M., Sasalovici, M., **Bazilinskyy, P.**, & Martens, M. (2024). Exploring holistic HMI design for automated vehicles: A participatory workshop to bridge

in-vehicle and external communication. In *Extended Abstracts of the 2024 CHI Conference on Human Factors in Computing Systems (CHI)*. Honolulu, HI, USA. <https://doi.org/10.1145/3613905.3651086>

44. Tran, T., Parker, C., Yu, X., Dey, D., Martens, M., **Bazilinsky, P.**, & Tomitsch, M. (2024). Evaluating autonomous vehicle external communication using a multi-pedestrian VR simulator. In *Proceedings of the ACM on Interactive Mobile Wearable and Ubiquitous Technologies*, 8(2). <https://doi.org/10.1145/3678506>
45. Driessen, T., Dodou, D., **Bazilinsky, P.**, & De Winter, J. C. F. (2024). Putting ChatGPT vision (GPT-4V) to the test: Risk perception in traffic images. *Royal Society Open Science*, 11:231676. <https://doi.org/10.1098/rsos.231676>
46. Alam, M. S., Subramanian, T., Remlinger, W., Martens, M. H., & **Bazilinsky, P.** (2024). From A to B with ease: User-centric interfaces for shuttle buses. In *Adjunct Proceedings of the 16th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Stanford, CA, USA. <https://doi.org/10.1145/3641308.3685033>
47. **Bazilinsky, P.**, Ebel, P., Walker, F., Dey, D., & Tran, T. (2024). It is not always just one road user: Workshop on multi-agent automotive research. In *Adjunct Proceedings of the 16th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Stanford, CA, USA. <https://doi.org/10.1145/3641308.3677400>
48. Gao, R., Verstegen, R., Dong, H., **Bazilinsky, P.**, & Martens, M. H. (2024). Incorporating multiple users' perspectives in HMI design for automated vehicles: Exploration of a role-switching approach. In *Adjunct Proceedings of the 16th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Stanford, CA, USA. <https://doi.org/10.1145/3641308.3685047>
49. Ebel, P., **Bazilinsky, P.**, Colley, M., Goodridge, C. M., Hock, P., Janssen, C., Sandhaus, H., Srinivasan, A. R., & Wintersberger, P. (2024). Changing lanes toward open science: Openness and transparency in automotive user research. In *Adjunct Proceedings of the 16th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Stanford, CA, USA. <https://doi.org/10.1145/3640792.3675730>
50. Alam, M. S., & **Bazilinsky, P.** (2025). Cross or nah? LLMs get in the mindset of a pedestrian in front of automated car with an eHMI. In *Adjunct Proceedings of the 17th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Brisbane, QLD, Australia. <https://doi.org/10.1145/3744335.3758477>
51. Alam, M. S., Parmar, S. H., Martens, M. H., & **Bazilinsky, P.** (2025). Deep learning approach for realistic traffic video changes across lighting and weather conditions. In *Proceedings of International Conference on Information and Computer Technologies (ICICT)*. Hilo, HI, USA. <https://doi.org/10.1109/ICICT64582.2025.00034>
52. Alam, M. S., Martens, M. H., & **Bazilinsky, P.** (2025). Generating realistic traffic scenarios: A deep learning approach using generative adversarial networks (GANs). In *Proceedings of International Conference on Human Interaction & Emerging Technologies: Artificial Intelligence & Future Applications (IHET-AI)*. Malaga, Spain. <https://doi.org/10.54941/ahfe1005927>
53. Alam, M. S., Martens, M. H., & **Bazilinsky, P.** (2025). Pedestrian planet: What YouTube driving from 233 countries and territories teaches us about the world. In *Adjunct Proceedings of the 17th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Brisbane, QLD, Australia. <https://doi.org/10.1145/3744333.3747827>
54. **Bazilinsky, P.**, Alam, M. S., & Merino-Martínez, R. (2025). Pedestrian crossing behaviour in front of electric vehicles emitting synthetic sounds: A virtual reality experiment. In *Proceedings of 54th International Congress & Exposition on Noise Control Engineering (INTER-NOISE)*. São Paulo, Brazil. https://doi.org/10.3397/IN_2025_1076086
55. Bazilinsky, P., Alam, M. S., Merino-Martínez, R. (2025). Psychoacoustic assessment of synthetic sounds for electric vehicles in a virtual reality experiment. In *Proceedings of 11th Convention of the European Acoustics Association (Euronoise)*. Malaga, Spain. <https://doi.org/10.48550/arXiv.2510.25593>
56. **Bazilinsky, P.**, Walker, F., Dey, D., Tran, T., Park, H., Kim, H., Kang, H., & Ebel, P. (2025). Quo-vadis multi-agent automotive research? Insights from a participatory workshop and questionnaire. In *Adjunct Proceedings of the 17th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Brisbane, QLD, Australia. <https://doi.org/10.1145/3744335.3758500>
57. Fortes-Ferreira, M., Alam, M. S., & **Bazilinsky, P.** (2025). Vibe coding in practice: Building a driving simulator without expert programming skills. In *Adjunct Proceedings of the 17th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Brisbane, QLD, Australia. <https://doi.org/10.1145/3744335.3758482>
58. Gao, R., Liu, H., **Bazilinsky, P.**, & Martens, M. H. (2025). Designing multi-modal communication for merge negotiation with automated vehicles: Insights from a design exploration with prototypes. In *Adjunct Proceedings of the 17th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Brisbane, QLD, Australia. <https://doi.org/10.1145/3744335.3758479>

59. Peng, C., **Bazilinsky, P.**, Yu, Y., & Merat, N. (2025). Measuring passengers' comfort and perceived safety in automated driving: Good practices, challenges, and opportunities. In *Adjunct Proceedings of the 17th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Brisbane, QLD, Australia. <https://doi.org/10.1145/3744335.3749142>
60. Sapienza, G., & **Bazilinsky, P.** (2025). Enhancing cyclist safety in the EU: A study on lateral overtaking distance across seven scenarios using lab and crowdsourced methods. In *Adjunct Proceedings of the 17th International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI)*. Brisbane, QLD, Australia. <https://doi.org/10.1145/3744333.3747813>
61. Kim, S., **Bazilinsky, P.**, Liang, K., Van Egmond, R., & Happee, R. (2025). Beyond beeps: Evaluating soundscapes for take-over situations in automated vehicles. *International Journal of Human–Computer Interaction*, 1–18. <https://doi.org/10.1080/10447318.2025.2537782>
62. Lingam, S. N., Petermeijer, S. M., Torre, I., **Bazilinsky, P.**, Ljungblad, S., & Martens, M. H. (2025). Behavioural effects of a delivery drone on feelings of uncertainty: A virtual reality experiment. *ACM Transactions on Human–Robot Interaction*, 14(4), 1–27. <https://doi.org/10.1145/3729538>
63. Lingam, N., Woziwodski, J., Obaid, M., Martens, M. H., & **Bazilinsky, P.** (2025). Thumbs up or pointing? Guiding a delivery drone under uncertainty in public space. In *Proceedings of the 13th International Conference on Human-Agent Interaction (HAI)*. Yokohama, Japan. <https://doi.org/10.1145/3765766.3765837>
64. Dong, H., Yuanzi, W., **Bazilinsky, P.**, Bruns, M., & Martens, M. H. (2025). Encountering automation surprise in everyday automated driving: An exploratory phenomenological inspired study using a Wizard-of-Oz vehicle on real motorways. In *Proceedings of International Association of Societies of Design Research Congress (IASDR)*. Taipei, Taiwan. <https://bazilinsky.github.io/publications/dong2025encountering>
65. Zeng, X., Alam, M. S., & **Bazilinsky, P.** (2025). *Enhancing driver experience in SAE level 3 automated vehicles through multimodal and emotion-aware in-vehicle agents*. Submitted for publication. <https://bazilinsky.github.io/publications/zeng2026enhancing>
66. **Bazilinsky, P.**, Heikoop, D., Verstegen, R., Martens, M. H., & De Winter, J. C. F. (2025). *How should drivers' use of Automated Lane Keeping Systems (ALKS) be assessed? A study with experienced driving assessors in a Wizard of Oz vehicle*. Submitted for publication. <https://bazilinsky.github.io/publications/bazilinsky2025how>
67. Alam, Md. S., Martens, M. H., Bazilinska, O., & **Bazilinsky, P.** (2025). *Understanding global pedestrian behaviour in 4965 cities with dashcam videos on YouTube*. Submitted for publication. <https://bazilinsky.github.io/publications/alam2026understanding>
68. Alam, M. S., & **Bazilinsky, P.** (2025). *Eighteen years of ASMR on YouTube: A multilingual, theme-level analysis of 20,087 videos*. Submitted for publication. <https://bazilinsky.github.io/publications/alam2026eighteen>
69. Alam, M. S., Wang, Z., Zhang, L., & **Bazilinsky, P.** (2025). *Exploring Veo 3's capabilities for generating urban traffic scenes in 76 cities worldwide*. Submitted for publication. <https://bazilinsky.github.io/publications/alam2025exploring>
70. Marinissen, T., Glimmann, J., & **Bazilinsky, P.** (2026). Teaching multimodal interaction in cars to first-time users. In *Proceedings of the 16th International Conference on Human Interaction & Emerging Technologies (IHET-AI)*, Valencia, Spain. <https://bazilinsky.github.io/publications/marinissen2026teaching>
71. Marinissen, T., & **Bazilinsky, P.** (2026). Visual feedback for in-car voice assistants. In *Proceedings of the 9th International Conference on Human Intelligent Systems Integration (IHSI)*. Florence, Italy. <https://doi.org/10.54941/AHFE-Paper-0013>
72. Alam, M. S., Dey, D., Martens, M. H., & **Bazilinsky, P.** (2026). *You'll never walk alone: Inter-pedestrian distance, eHMIs, and crossing decisions in virtual reality*. Submitted for publication.
73. Sapienza, G., & **Bazilinsky, P.** (2026). *How sustainable materials are judged in motion: Designing and testing a hybrid composite bicycle frame*. Submitted for publication.
74. Alam, M. S., Singh, P., & **Bazilinsky, P.** (2026). *A survey of day-night illumination domain translation for outdoor vision covering 30 methods 22 datasets and evaluation protocols*. Submitted for publication.
75. Verstegen, R., Gao, R., **Bazilinsky, P.**, & Martens, M. H. (2026). *Exploring road user uncertainty during encounters with automated vehicles: A repertory grid study*. Submitted for publication.
76. Oudshoorn, M. P. J., De Winter, J. C. F., & **Bazilinsky, P.**, & Dodou, D. (2026). *Intent communication in nature: an overview of biological paradigms and their applicability to automated vehicles*. Manuscript in preparation.
77. De Winter, J. C. F., Dodou, D., & **Bazilinsky, P.** (2026). *The identification of factors affecting drivers' perceived risk in pedestrian-vehicle interaction: A crowdsourcing study*. Manuscript in preparation.
78. Fang, Y., **Bazilinsky, P.**, & Martens, M. H. (2026). *Inaccurate mental models in human–AV interaction: A scoping review of constructs, KPIs, and scenario-based measurement*. Manuscript in preparation.

79. Gao, R., **Bazilinsky, P.**, & Martens, M. H. (2026). *Drivers' and passengers' psychological discomfort in mixed traffic: Crowd sourced assessment of multiple driving behaviours of other manual and automated vehicles*. Manuscript in preparation.
80. Ebel, P., Lorenz, M., Hilbert, J., **Bazilinsky, P.**, Miazga, M., Getselev, T., & Conzen, C. (2026). *MRDrive: An open source mixed reality driving simulator for automotive user research*. Manuscript in preparation.
81. Morkute, U. A., Drieben, J., **Bazilinsky, P.**, & Walker, F. (2026). *When three share the ride: Social meaning-making and real-time trust loss signals in automated vehicles*. Manuscript in preparation.
82. Alam, M. S., & **Bazilinsky, P.** (2026). *Deep reinforcement learning based eye tracking for Unity environment*. Manuscript in preparation.
83. Verstegen, R., **Bazilinsky, P.**, & Martens, M. H. (2026). *500 hours on the road: A digital ethnographic study of interactions between other road users and automated vehicles*. Manuscript in preparation.

* Joint first author.

Posters:

1. **Bazilinsky, P.**, Cabral, C. D., Eriksson, A., Gonçalves, J., Heikoop, D., Kyriakidis, M., ... Varotto, S. (2017). HFauto research highlights. In *Automotive Week 2017*.
2. **Bazilinsky, P.** (2017). Auditory displays for automated driving. In *2017 MCAA Conference*.
3. Siegling, L., Dodou, D., De Winter, J. C. F., **Bazilinsky, P.**, & Stuit, S. (2020). A naturalistic pilot study of cyclists' eye-and head movement using head-mounted eye tracking.

Conferences: <https://bazilinsky.github.io/talks/#talks>

1. Student Conference on Optimisation of Software (StuConOS 2013), London, UK, 25–26 June 2013.
2. International Conference on Applied Human Factors and Ergonomics (AHFE 2015), Las Vegas, NV, USA, 17–21 July 2015.
3. International Conference on Auditory Display (ICAD 2015), Graz, Austria, 6–10 July 2015.
4. IFAC/IFIP/IFORS/IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems (IFAC HMS 2016), Kyoto, Japan, 30 August–2 September 2016.
5. IEEE International Conference on Systems, Man, and Cybernetics (SMC 2016), Budapest, Hungary, 9–12 October 2016.
6. International Robotics Week (RV17), The Hague, The Netherlands, 19–21 April 2017.
7. International Conference on Applied Human Factors and Ergonomics (AHFE 2017), Los Angeles, CA, USA, 17–21 July 2017.
8. Road Safety and Simulation conference 2017 (RSS 2017), The Hague, The Netherlands, 17–19 October 2017.
9. Tools and Methods of Competitive Engineering (TMCE 2018), Las Palmas de Gran Canaria, Spain, 7–11 May 2018.
10. International Congress on Sound and Vibration (ICSV 2019), Montreal, QC, Canada, 7–11 July 2019.
11. International Conference on Human-Computer Interaction (HCII 2019), Orlando, FL, USA, 26–31 July 2019.
12. Driving Simulation Conference (DSC 2020), Antibes, France, 9–11 September 2020.
13. IEEE International Conference on Systems, Man, and Cybernetics (SMC 2020), Toronto, ON, Canada, 11–14 October 2020. Chair of session "Human-Machine Cooperation: Assistance".
14. International Conference on Applied Human Factors and Ergonomics (AHFE 2022), online, 25–29 July 2021.
15. International ACM Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI 2022), Seoul, South Korea, 27–31 March 2022.
16. International Conference on Applied Human Factors and Ergonomics (AHFE 2022), New York, NY, USA, 24–28 July 2022.
17. Intelligent User Interfaces Conference (IUI 2023), Sydney, NSW, Australia, 27–31 March 2023.
18. International ACM Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI 2023), Ingolstadt, Germany, 18–21 September 2023.
19. Conference on Human Factors in Computing Systems (CHI 2024), Honolulu, HI, USA, 11–16 May 2024.
20. EuroScience Open Forum, Katowice, Poland, 12–15 June 2024.
21. Car.HMI Europe, Berlin, Germany, 26–29 June 2024.
22. International Conference on Applied Human Factors and Ergonomics (AHFE 2024), Nice, France, 24–27 July 2024. Chair of session "Public Transportation and Safety II".

23. International ACM Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI 2024), Stanford, CA, USA, 22–25 September 2024.
24. Car.HMI Europe, Berlin, Germany, 15–17 June 2025.
25. Euronoise Conference, Malaga, Spain, 23–26 June 2025.
26. INTER-NOISE Conference, São Paulo, Brazil, 24–27 August 2025.
27. MSCA Danish Presidency Conference, Copenhagen, Denmark, 18–19 September 2025.
28. International ACM Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI 2025), Brisbane, QLD, Australia, 22–25 September 2025.
29. Conference on Research Careers, Brussels, Belgium, 11–12 December 2025.
30. Intelligent Human Systems Integration (IHSI) Conference, Florence, Italy, 11–13 February 2026.
31. Human Interaction & Emerging Technologies: Artificial Intelligence & Future Applications (IHET-AI) Conference, Valencia, Spain, 23–25 April 2026.
32. International ACM Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI 2026), Gothenburg, Sweden, 20–23 September 2026.

Chairing: <https://bazilinskyy.github.io/talks/#chairing-duties-for-conferences>

1. AutomotiveUI [Associate chair](#) (2024) – Stanford, CA, USA.
2. AutomotiveUI [Chair of open data](#) (2024) – Stanford, CA, USA.
3. IEEE RO-MAN [Associate chair](#) (2025) – Eindhoven, The Netherlands.
4. AutomotiveUI [Sustainability chair](#) (2025) – Brisbane, QLD, Australia.
5. AutomotiveUI [Associate chair](#) (2025) – Brisbane, QLD, Australia.
6. AutomotiveUI [Work-in-Progress chair](#) (2026) – Gothenburg, Sweden.

Workshops: <https://bazilinskyy.github.io/talks/#workshops>

1. [Breaking barriers: Workshop on open data practices in AutoUI research](#) (2023) at AutomotiveUI, Ingolstadt, Germany.
2. [Holistic HMI design for automated vehicles: Bridging in-vehicle and external communication](#) (2023) at AutomotiveUI, Ingolstadt, Germany.
3. Multi-agent research (2023) at the University of Sydney, Sydney, NSW, Australia.
4. [Multi-agent research in automotive](#) (2024) at AutomotiveUI, Stanford, CA, USA.
5. [Measuring passengers' comfort and perceived safety in automated driving](#) (2025) at AutomotiveUI, Brisbane, QLD, Australia.

Awards: <https://bazilinskyy.github.io/about/#awards>

1. [Best paper during StuConOS 2013](#) from University College London.
2. [Best student](#) out of 20 students in MSc DESEM from University of St Andrews, 2013 and Maynooth University, 2014.
3. [European Young Researchers' award 2017](#) from EuroScience: to recognise PhD candidate who has demonstrated an outstanding research performance, leadership and outreach and has incorporated a clear European dimension in their research.
4. [Best innovator award 2018](#) from MCAA: to reward a member of MCAA who presents the best innovation approach.
5. [Alumni award 2018](#) from EMA: to celebrate the outstanding achievements of alumni of Erasmus Mundus programmes.
6. Finalist of [2020 IEEE SMC Franklin V. Taylor award](#) (5 finalists in SMC 2020).
7. [Open Science award 2020](#) within National Programme Open Science of the Netherlands (NPOS).
8. [Applied Ergonomics Journal Best Paper award 2021](#) from CIEHF.
9. [Convergence Health and Technology Open Research award 2021](#) from Convergence Alliance.
10. Nomination for [Leo Waaijers Open Science award](#) from UKB (2024).
11. AutomotiveUI [Honorable Mention award](#) from SIGCHI (2025).
12. AutomotiveUI [Open Science award](#) from SIGCHI (2025).
13. [Open Data award](#) from SaxFDM (2025).

Grants: <https://bazilinskyy.github.io/about/#grants>

1. [FAIR data fund 2021](#) from 4TU.ResearchData.
2. Support in preparation of CSA “[MCAA new horizon: Enhancing the impact of MSCA Alumni on the European Research Landscape](#)” for MCAA (HORIZON-MSCA-2022-ALUMNI-IBA) from the European Commission (2022).
3. [4TU.NIRICT community fund 2023](#) from 4TU.NIRICT.
4. Grant for a PhD for tenure-trackers in the Netherlands from the Ministry of Education, Culture and Science of the Netherlands (2023).
5. Support in preparation of CSA “[Career Advancement, Policy Impact, and Networking for the MSCA Community](#)” for MCAA (HORIZON-MSCA-2024-ALUMNI-IBA) from the European Commission (2024).
6. [4TU.Design United probe](#) from 4TU.Design United (2024).
7. [NWO Small compute application](#) from NWO (2025).
8. [EuroTech Visiting Researcher grant](#) for visiting EPFL from the EuroTech Universities Alliance (2025).
9. [EAISI Visiting professor grant](#) for Dr. P. Ebel to visit TU/e from the EAISI institute of TU/e (2025).
10. [Horizon Europe CERTAIN](#) (WP leader) from the European Commission (2025).
11. [EAISI Visiting professor grant](#) for Dr. M. Colley to visit TU/e from the EAISI institute of TU/e (2025).
12. EAISI Visiting professor grant for Dr. M. Hoggenmueller to visit TU/e from the EAISI institute of TU/e (2026).

Teaching and supervision: <https://bazilinskyy.github.io/education>

- MSc course Automotive human factors (TU/e, course coordinator, 2022–present).
- MSc course Conversational design with multi-modalities (TU/e, 2023–2024).
- BSc course Data analytics for engineers (TU/e, 2023–2024).
- MSc course Embodying Intelligent Behavior in Social Context (TU/e, 2024–present).
- Guest lectures during Human-Machine systems course of Prof. Joost de Winter at TU Delft (2015).
- Supervision of 20 BSc final project groups, 45 MSc final projects, 7 PhD students, and 7 internships (TU Delft, TU/e).
- Supervision of 6 groups of students at [HBO Avans](#) in the course [Trust me, I'm a designer](#) (2026).
- Squad leader of the [Future Mobility squad](#) (2024–present).

Technical skills and interests:

- **Programming languages:** advanced Python, C, C++, HTML/CSS/PHP, MATLAB; intermediate Java SE, R; reasonably good command of Java EE, Qt, Ruby, Pascal. **Databases:** advanced MySQL; average Oracle, PL/SQL.
- **Networking:** CCNA, mobile and wireless networks, telecommunications. **Research:** LaTeX, BibTeX, Mendeley.
- **Languages:** Ukrainian (mother tongue), Russian (mother tongue), English (fluent, TOEFL iBT: 104, IELTS: 8.0), German (intermediate, Goethe Institute: A2), Dutch (intermediate, B1), Finnish (basic).
- **Volunteering:** work camp [Holzlabor](#) (Thalheim, Switzerland; SCI), volunteer for the Vedic festival [Vedalife 2013](#), [LEAD 2014 Conference](#) student tutor, member of the charity [Your600th Marathon team](#) of University of St Andrews, restoration of Your600th legacy garden.
- **Organisation:** MCAA Bridging Science and Academia workshops in [Gdansk](#), 2017 (50 people) and [Paris](#), 2018 (70 people), [Kyiv](#), 2019 (40 people), [Berlin](#), 2019 (100 people), session [Environmental impact of transportation on Europe](#) at ESOF 2018.

Other activities:

- Peer review of submissions to conferences: CHI, IJDS, RSS, TMCE, ESOF, DIS, AutoUI; journals: Applied Ergonomics, Case Studies on Transport Policy, Ergonomics, Forschung im Ingenieurwesen, Frontiers, Human Factors, Information, Multimodal Technologies and Interaction, PeerJ, Psych, Transportation Research Part A, Transportation Research Part F.
- Awardee of **micro grants** for participating in EMA GA (2014, 2016, 2017, 2019, 2020, 2023, 2024) and MCAA GA (2016, 2017, 2018, 2019, 2020, 2022, 2023, 2024, 2025).
- Participant of [Berlin Summer School Human Factors](#), 2015; [ETH Zürich Cortona Week](#), 2017.
- Presentation of VR-based work on automated driving during the [Researchers' Night 2018](#) exhibition in Brussels.
- Awardee of **scholarship** for participating in [European Forum Alpbach](#) (2020, 2021).
- Charing session on sonification for blind astronomers at the [Audible Universe workshop 2021](#) by Lorentz Center.
- Member of the [Professional Government Association](#) of Ukraine (PGA, 2018–now).
- Member of Coalition for Advancing Research Assessment [CoARA](#) (2025–now).
- Member of the consortium of [RESAVER](#) pension fund (2025–now).

- Review of posters at EMA GA (2024, 2025).