

Wilbert Tabone, PhD

human-computer interaction researcher · designer · policy advisor

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**I explore how humans interact with their surroundings,
from cultural artifacts to robots and AI.**

Highly motivated researcher specialised in Human-Computer Interaction, and Cognitive Human Robot-Interaction, within complex environments. I have extensive experience in human factors research and working in both the private and public sectors. Skilled in advanced design techniques, system design, experiment design, and data analysis, with a strong publication record. Proven track record in leadership, mentoring, policy advisory, and project management in academic and professional settings. Adept in applying technological solutions such as spatial computing and applied AI in various domains, including robotics, transport, hospitals, museums, and tourism. New-media artist.

· work experience ·

Postdoctoral Researcher in Designing for Human-Centric Robot Interactions

Erasmus University Medical Centre, Rotterdam, Netherlands | **Jun 2025 – Present**

- **Project:** I am part of the Convergence project '*Facing the nursing shortage: innovating for a better future*' (NURTURE), a collaboration between the Erasmus MC, Erasmus University, FRAIM, and Delft University of Technology. My advisors are Steven Prize winner Prof. David Abbink, and Dr Marco Rozendaal.
- **Research focus:** My role in this multidisciplinary project involves championing AI and robotics to alleviate various demands within nursing work. I am drawing upon various research methods from multiple disciplines, such as design, engineering, and the social sciences, in accomplishing the goals set out in the project. In the end I shall deliver prototypes and policy recommendations to the organisation.
- **Guest position:** Embedded within the StudioLab research environment at the Faculty of Industrial Design Engineering, TU Delft, where I am affiliated with the departments of Human Centred Design, and Sustainable Design Engineering.

Postdoctoral Researcher in Spatial Computing and Human Perception

Delft University of Technology, Delft, Netherlands | **Jun 2024 – Jun 2025**

- **Experiment design:** During my postdoc at the department of Cognitive Robotics, ME, TU Delft, I worked on an experiment that investigates how humans visually sample critical information within a spatial computing environment (using MagicLeap 2). My findings are useful in designing augmented reality dashboards for time-sensitive critical situations, such as nuclear power plant control rooms. A further outcome was a scientific journal publication with the participation of a leading figure in the field.

- **Further work:** I also developed an experiment that uses Steady-state visually evoked potentials (SSVEPs) stimuli to explore how human-robot interactions can be enhanced through brain-computer interfaces in a spatial computing environment.

Marie Skłodowska-Curie Early-Stage Researcher (PhD Candidate)

Delft University of Technology, Delft, Netherlands | Feb 2020 – Feb 2024

- **Research Focus:** I formed part of a Horizon 2020 European research consortium (SHAPE-IT). My PhD formed part of a work package investigating the external interactions between pedestrians and automated vehicles.
- **Research Experience:** Designed, developed, and evaluated nine novel AR interfaces using several research and development tools: online surveys, CAVE-based VR setups (at the University of Leeds), and head-mounted VR/AR setups.
- **Teaching and Mentoring:** Delivered guest lectures, supervised 4 M.Sc. theses, and mentored over 21 M.Sc. students.
- **Leadership and Coordination:** Organised and chaired research forums, colloquia, and consortium meetings.
- **Publications and Reviews:** During my PhD, I served as a reviewer for several cross-disciplinary journals and conferences. Furthermore, I published several open data sets and 14+ peer-reviewed papers in journals and conferences that attracted around 300 citations during my PhD alone.

Creative Computing Executive and Data Protection Officer

Heritage Malta, Kalkara, Malta | Jul 2019 – Jan 2020

- **User Experience Enhancement:** Developed experiences using AI and spatial computing technologies to enhance visitor journeys to heritage sites such as museums, catacombs, and fortifications.
- **Cross-Linked Projects:** Collaborated on projects across government entities to produce integrated visitor experiences through a one-stop shop AR experience.
- **Digital Ecosystem Development:** Worked with the Digitization department to create a digital ecosystem for Heritage Malta's artefact collection.
- **Data Protection:** I served as the Data Protection Officer for the National Heritage Agency.

Project, Communications, and Information Technology Coordinator

MUŻA – National Community Art Museum, Valletta, Malta | Aug 2017 – Aug 2019

- **Technology and UX Advisory:** Provided technology, audiovisual and UX advice, enhancing museum visitors' experience.
- **Project Coordination:** Ensured coherence between departments such as the museum café and restaurant, the concept store, and the gallery space. Maintained triangulation while I was also responsible for developing the concept store and commissioning artists.
- **Communications and Events Management:** Publicized the museum's development, managed media campaigns, and coordinated high-profile events, including the official

inauguration by the Government and the NEMO General Conference 2018 held under the auspices of the EU Commissioner for Culture.

Communications and Digital Technology Officer

Ministry for Tourism, Malta | Jan 2017 – Jun 2017

Junior Software Developer

Ixaris Systems Ltd., San Ġwann, Malta | Jun 2015 – Apr 2016

Software Developer Student Placement

GO plc., Marsa, Malta | May 2014 – Sep 2014

Intern QA Technician

Bigpoint International Services Ltd., Ta'Xbiex, Malta | May 2012 – Mar 2013

· other appointments ·

Commission Member

*National Commission for the Promotion of Equality (NCPE), Malta | **Jun 2022 – Present***

- As a commission member of the NCPE, I work to advance a society free from discrimination in Malta. My role involves promoting and safeguarding equality across employment, financial services, education, and the provision of goods and services—ensuring fairness regardless of gender, sexual orientation, age, religion, ethnicity, or other characteristics. Additionally, I contribute to initiatives that support gender balance on corporate boards and uphold equal opportunities for workers within the EU. I also form part of the 'Equality Mark' board.

External Quality Assurance Auditor and Consultant

Malta Further & Higher Education Authority (MFHEA), Malta | Mar 2015 – Present

- Contracted to audit higher education institutions to ensure compliance with European and international education standards.
- Participated in over 20 audits of several prominent Maltese institutions.
- I am also experienced in programme reviews and extension of scope reviews.

Board Member and Secretary

Malta National Task Force on Artificial Intelligence, Malta | Oct 2018 – Nov 2019

- Contributed to the development of Malta's National AI Strategy as part of a government task force appointed by the Prime Minister.

- I sat in the Education and Workforce working group, where I was responsible for engaging educators, universities, industry, and workers' unions in contributing to the national strategy.
- As the board secretary, I spearheaded the research process and engaged government and private sector stakeholders in contributing to a holistic AI and technology policy, which was compiled and published during an AI summit.

· skills ·

technical and design	Unity, Unity MARS, Xcode, Prolific, Otter.ai, R Studio, Adobe Photoshop, Adobe Illustrator, Adobe InDesign, Adobe Premiere Pro, TouchDesigner, Tobii Eye Tracking, VARJO XR, Microsoft Hololens (MRTK), Apple Vision Pro, Magic Leap 2, Adobe XD, Figma, Miro, Large Language Model applications (OpenAI API, Mistral), Stable Diffusion, Stream Diffusion, Blender, Touchdesigner, Reality Composer, RealityCapture, EEG Capture and Analysis, Data Analysis, LaTeX.
programming languages	Python, R, Matlab, C#, Swift, Java, Processing, p5js, Arduino.
research and science	Design Thinking, Human Factors, User Experience, Augmented Reality, Virtual Reality, Emerging Technologies, Human-Robot Interaction, Human-Computer Interaction, Systems Design, Applied Artificial Intelligence, Computational Art, Human-Computer Interaction, Cognitive Robotics, Autonomous Vehicles, Simulators, Eye Tracking, Digital Cultural Heritage.
soft skills	Project Management, Academic Writing, Teaching, Mentoring, Policy Advisory, Communication, Scientific Communication, Disseminating Complex Information, Presentation skills, Experience with European projects.
natural languages	Maltese: Native, English: C2 (Proficient), French: A2 (Basic), Dutch: A2 (Basic), Italian: A2 (Basic).

· education

Ph.D. in Cognitive Human-Robot Interaction

Delft University of Technology, Delft, Netherlands | Feb 2020 – Nov 2023

- **Thesis:** “Bridging Worlds: Augmented Reality for Pedestrian-Vehicle Interactions”.
- **Training:** Followed a rigorous Doctoral Education Programme at TU Delft, covering research methods, discipline-related skills, negotiation techniques, management skills, and transferrable skills. I received further skill training from the Marie Curie Project.
- **Networking:** Attended and presented at several international conferences, symposia, and summer schools on human factors, human-computer interaction, and XR.
- **Mobility:** Conducted research as a visiting PhD Candidate with the Human Factors & Safety research group, Institute of Transport Studies, University of Leeds, The United Kingdom, and collaborated with partners in the United States.
- **Funding:** Awarded Horizon 2020 (Marie Curie) funding and Erasmus+ mobility funding.
- Certified in Human Research Protection Training by the US Department of Health and Human Services.

M.Sc. in Artificial Intelligence

University of Malta, Msida, Malta | Sep 2015 – Oct 2017

- **Dissertation:** "Semi-Automatic Segmentation of Human Anatomical Imagery". Research was published and presented in a computer vision conference.
- **Mobility:** Conducted my dissertation research with the Intelligent Systems group, Johann Bernoulli Institute for Mathematics and Computer Science, University of Groningen, and the Department of Anatomy of the University Medical Centre Groningen, The Netherlands.
- **Funding:** Awarded ENDEAVOUR and Erasmus+ Scholarships.

Diploma in European and International Studies

University of Vienna, Strobl, Austria | Jun 2016 – Aug 2016

- **Studies:** Focused on EU Framework and legislative procedures, European political systems, Law and information society, European business and strategic management.
- **Funding:** Awarded a scholarship by the University of Vienna.

B.Sc. (Hons.) in Creative Computing

Goldsmiths College, University of London | Sep 2012 – May 2015

- **Dissertation:** "Recognising Familiar Facial Features in Paintings Belonging to Separate Domains". Research was published and presented in a computer vision conference.
- **Funding:** Awarded the STAR scholarship.
- Graduated with First-Class Honours.

· **selected publications** ·

Journal publications:

- Tabone, W., De Winter, J. C. F., Zhang, R., Wickens, C. D., Van de Ruit, M., Eisma, Y.B. (2025). Embodied Sampling: An Augmented Reality Investigation of Visual Attention. *Manuscript in review*.
- Tabone, W., & De Winter, J. C. F. (2023). Using ChatGPT for Human-Computer Interaction Research: A Primer. *Royal Society Open Science*, 10, 231053.
- Tabone, W., Happee, R., Garcia, J., Lee, Y. M., Lupetti, M. C., Merat, N., & De Winter, J. C. F. (2023). Augmented reality interfaces for pedestrian-vehicle interactions: An online study. *Transportation Research Part F: Traffic Psychology and Behaviour*, 94, 170–189.
- De Winter, J. C. F., Dodou, D., & Tabone, W. (2022). How do people distribute their attention while observing The Night Watch? *Perception*, 51, 763–788.
- Tabone, W., De Winter, J. C. F., Ackermann, C., Bärghman, J., Baumann, M., Deb, S., Emmenegger, C., Habibovic, A., Hagenzieker, M., Hancock, P. A., Happee, R., Krems, J., Lee, J. D., Martens, M., Merat, N., Norman, D. A., Sheridan, T. B., & Stanton, N. A. (2021). Vulnerable road users and the coming wave of automated vehicles: Expert perspectives. *Transportation Research Interdisciplinary Perspectives*, 9, 100293.

Conference papers:

- Joshi, S., Block, A., Tabone, W., Pandya A., & Schmitt, P. (2023). Advancing the State of AV-Vulnerable Road User Interaction: Challenges and Opportunities. *Proceedings of the AAAI 2023 Spring Symposium*. Palo Alto, California, United States.
- Block, A., Joshi, S., Tabone, W., Pandya A., Lee, S., Patil, V., Britten, N., & Schmitt, P. (2023). The Road Ahead: Advancing Interactions between Autonomous Vehicles, Pedestrians, and Other Road Users. *Proceedings of the 32nd IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)*. Busan, South Korea.
- Tabone, W., Lee, Y.M., Merat, N., Happee, R., & De Winter, J.C.F. (2021). Towards future pedestrian-vehicle interactions: Introducing theoretically-supported AR prototypes. In *13th International Conference on Automotive User Interfaces and Interactive Vehicular Applications* (pp. 209-218).

Book chapters:

- Tabone, W. (2020). The Effectiveness of an Augmented Reality Guiding System in an Art Museum. *Rediscovering Heritage Through Technology* (pp. 197-214). Springer, Cham.
- Tabone, W. (2019). *Technology for Cultural Heritage*. Tesseract Edition. Heritage Malta.

A full list of publications and open data sets is available [here](#). Further information is available on my [website](#) or [Google Scholar](#) profile.

· grants ·

Marie Skłodowska-Curie ITN

Horizon 2020 | 2020 – 2024

Awarded over €200,000 of funding as a Marie Skłodowska-Curie Early Stage Researcher to pursue my PhD studies. My application ranked 1st from around 100 candidates.

Sommerhochschule Scholarship

University of Vienna | 2016

Awarded over €1,800 of funding to follow a diploma in European and International Studies in Austria.

Endeavour Scholarship

Ministry for Education, Malta & Horizon 2020 | 2015 – 2017

Awarded over €2,000 of funding to pursue my postgraduate studies in Artificial Intelligence. My application ranked 96 from 228 candidates across all categories.

STAR Scholarship

Ministry for Education, Malta & Horizon | 2012 – 2015

Competed for over €16,000 in funding to pursue my undergraduate degree. My application ranked 3rd among the 31 candidates applying in the ICT category.

· organisational experience ·

The Malta Society of Arts | Committee Member | 2019-2020; 2025 - present.

National Commission for the Promotion of Equality | Comm. Member | 2022 - present.

LGBTI+ Gozo | Executive Board Member | 2018 - 2023.

Europe & Africa Subcommittee (Commonwealth Youth Council) | Exec | 2018 - 2020

National Task Force on Artificial Intelligence | B. Member and Secretary | 2018 - 2019.

Google Developer's Group Malta | Press Relations Officer | 2016.

Commonwealth Heads of Government Meeting | Stage Management | 2015.

Malta Sea Cadets Corps (Royal Navy) | Instructor and Petty Officer | 2014 - 2016.

International Game Developer Association, Malta | Board Member | 2012 - 2016.

Qrendi Scouts Group | 2002 - 2005.

Ecoschool Committee | Secretary General | 2005 - 2010.

Socially Aware Autonomous Mobility (SAAM) Consortium (Boston, USA) | Member.

Interaction Design Foundation | Member.

Association for Computing Machinery (ACM) | Member.

Special Interest Group on Computer-Human Interaction (SIGCHI) | Member.

· **selected talks and outreach activities** ·

Outreach activities:

Design & AI Symposium | **Workshops** | Eindhoven, NL | 2025
Beyond Domains XR Symposium | **Presenter** | Ede, Netherlands | 2025
CHI Work Conference | **Workshop** | Amsterdam, Netherlands | 2025
AIUla Future Culture Summit | **Invitee** | Saudi Arabia | 2024
Design for AI Symposium | **Workshops** | Delft, NL | 2023
Maltese Cabinet of Ministers (Session on AI and Digitisation) | **Keynote Speaker** | Malta | 2023
EESC and EU Parliament (Session on AI) | **Invited Speaker** | Brussels, BE | 2023
Dutch Royal Academy of Arts and Sciences | **Workshop** | Amsterdam, NL | 2023
Post-CHI Summer School on Extended Reality | **Presenter** | Copenhagen, DE | 2023
ACM CHI Conference on Human Factors in Computing Systems | **Workshop** | Hamburg | 2023
IEEE International Symposium on Mixed and Augmented Reality | **Workshop** | Singapore | 2022
Int. Conference on Traffic and Transport Psychology (ICTTP) | **Presenter** | Gothenburg | 2022
Int. Conf. on Applied Human Factors and Ergonomics (AHFE) | **Presenter** | New York | 2022
EuroScience Open Forum (ESOF) | **Workshops** | Leiden, NL | 2022
ACM Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutoUI), | **Presenter, Workshops** | Leeds, UK | 2021
ACM CHI Conference on Human Factors in Computing Systems | **Workshop** | Yokohama | 2021
Vodcast on driverless vehicles | **Vodcast** | Malta | 2021
World Museum Forum | **Keynote Speaker** | Seoul, South Korea | 2020
Malta: Towards a National AI Strategy | **Invited Speaker** | St. Julian's, Malta | 2019
Applications of Intelligent Systems (APPIS) | **Presenter** | Las Palmas de Gran Canaria | 2019
Interview about AI by Business Today | **Newspaper** | Malta | 2019
Interview about Technology for Museums by ICOM UK | **Magazine** | United Kingdom | 2019
Opinion piece on the Times of Malta | **Newspaper** | Malta | 2018
Int. Conf. on Computer Analysis of Images and Patterns (CAIP) | **Presenter** | Malta | 2016

Guest Lecturing and teaching:

Using Large Language Models for research | Erasmus MC | 2025
Guest Lecture on Human Perception and its role in designing interactions | TU Eindhoven | 2025
Large Language Models for Human-Computer Interaction | TU Delft | 2024
Extended Reality Unit (Course: ME41080 - Human-machine systems) | TU Delft | 2020-2024
Guest Lecture on Artificial Intelligence for Cultural Heritage | Valletta, Malta | 2019

Conference, workshop, and exhibition organisation and management:

Design United Exhibition at Dutch Design Week | **Organiser** | Eindhoven, NL | 2025
SHAPE-IT Final Event | **Organiser** | Gothenburg, SE | 2023
SHAPE-IT Consortium Meeting | **Organiser** | Delft, NL | 2022
Network of European Museum Organisations Conference | **Organiser** | Valletta, MT | 2018
United Nations World Tourism Organisation (UNWTO) High-Level Conf. | **Management** | 2017

Mediterranean Tourism Foundation Annual Conference | **Management** | Malta | 2017
EU2017MT Ministerial Conference on Tourism | **Management** | Malta | 2017.
European Commission, High-Level Conference on Sustainable Tourism | **Management** | 2017
Commonwealth Heads of Government Meeting (CHOGM) | **Management** | Malta | 2015
Google I/O | **Management** | Malta | 2015, 2016, 2017, 2018

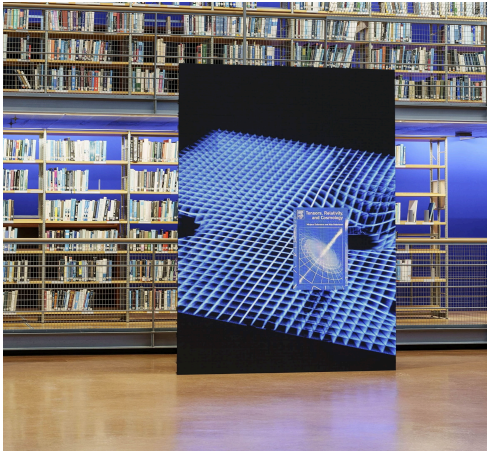
Other conference activities (attended as Delegate):

Marie Curie Alumni Association Annual Conf. and General Assembly | Krakow, Poland | 2025
Immersive Tech Week | Rotterdam | 2024
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MED9 Summit | Ta' Qali, Malta | 2023
ACM International Conference on Mobile Human-Computer Interaction | Virtual | 2020
DELTA Summit | Ta' Qali, Malta | 2019
THU: Trojan Horse Was a Unicorn | Valletta, Malta | 2019
Malta AI and Blockchain Summit | St. Julian's, Malta | 2019
Malta Blockchain Summit | St. Julian's, Malta | 2018
DELTA Summit | St. Julian's, Malta | 2018
Intelligence (IGGI) Conference, Queen Mary University of London | London | 2018
XIX World Festival of Youth and Students, Russia | 2017
ZEST Malta (business and entrepreneur event) | Malta | 2016
VS-Games (University of Malta conference on serious digital games) | Malta | 2014
Malta Enterprise conference on national strategy for digital games | Malta | 2012

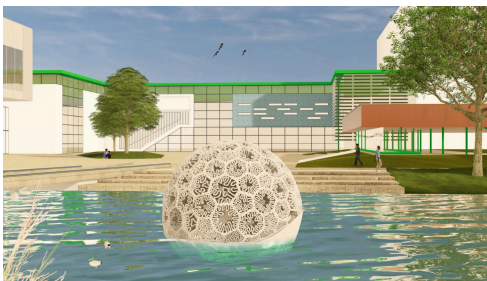
· **selected projects and art** ·



Seen by the Sun (installation) by Jeroen Alexander Meyer (technical assistance) (2025).



Sound of Matter (soundscape) at TU Delft Library (2025). Collaboration with EMERGENCE Delft dream team.



Collaborative pond sculpture project with Dutch artists Niels Albers and Jan Koen Lomans.

The portfolio is available on the [website](#).