

Prof. Adriana Tapus

PERSONAL INFORMATION

Family name, First name: TAPUS, Adriana

Researcher unique identifier(s) (such as ORCID, Research ID, etc. ...): 0000-0002-2793-4511; H-index: 37

Nationality: French /Romanian

URL for web site: <https://perso.ensta-paris.fr/~tapus/eng/>

• EDUCATION

2011 Habilitation à Diriger des Recherches (HDR), UPMC, Sorbonne University, France
2005 PhD, Computer Science Department, EPFL, Switzerland
2002 Master, Computer Science Department, Université Joseph Fourier, Grenoble, France
1998 - 2003 Engineer Degree, Computer Science, Politehnica University of Bucharest, Romania

• CURRENT POSITION(S)

2019 – now Director of the Doctoral School of IP Paris (ED 626)
 Institut Polytechnique de Paris (IP Paris), France
2012 – now Full Professor
 Computer Science and System Engineering Department (U2IS), ENSTA Paris, France

• PREVIOUS POSITIONS

2014 – 2019 Director of the Interfaces Doctoral School, University Paris Saclay (UPSaY), France
2011 – 2012 Associate Professor, ENSTA Paris, France
2009 – 2011 Assistant Professor, ENSTA Paris, France
2005 – 2009 Research Associate, University of Southern California (USC), USA

• FELLOWSHIPS AND AWARDS

2022 Knight of the Order of Academic Palms 2022 (Chevalier des Palmes Académiques)
2016 Award “25 women in robotics– 2016” – Robohub
2010 Featured researcher with portrait projected on the Panthéon, exhibition “1000 Researchers Speak of the Future” (by Pierre Maraval), Paris, October 2010
2009 Romanian Academy Award “Tudor Tanasescu” for the contributions in assistive robotics
2013 – 2025 Finalist Best Paper Award (ICSR 2022); Best Late Break Report, 2nd Prize (HRI2022); Best Interactive Session Poster Award (IEEE RO-MAN 2019); Outstanding Paper Award (ICCRS 2019); Recognition of Service Award in Appreciation for Contributions to ACM (General Chair HRI 2019); Finalist Best Paper Award in Cognitive Robotics (ICRA 2018); Finalist Best Paper Award (IV 2018); Recognition of Service Award in Appreciation for Contributions to ACM (Program Chair HRI 2018); Finalist JTICF Novel Technology Paper Award (IROS 2015); Finalist Best Paper Award (CHI 2015); Best Paper Award (RAAD 2015); Springer Outstanding Best Poster Paper Award Runner-Up (CTS 2013)

• SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2009 – 2025 Postdocs (4)/ PhD (17 finished; 5 currently)/ Master Students (36)

• ORGANISATION OF SCIENTIFIC MEETINGS

2025 Program Chair, International Conference on Social Robotics (ICSR) 2025
2019 General Chair, Human-Robot Interaction Conference (HRI) 2019
2018 Program Chair, Human-Robot Interaction Conference (HRI) 2018
2017 General Chair, European Conference on Mobile Robotics (ECMR) 2017
2015 General Chair, International Conference on Social Robotics (ICSR) 2015
2006 – 2025 Organizer of more than 35 workshops at various conferences (e.g., ICSR, RSS; AAI SS; HRI; IROS; ICRA; Humanoids; RO-MAN; ITSC; ACII)

• INSTITUTIONAL RESPONSIBILITIES

2023 – Member of the Romanian Scientific and Ethical Council on Artificial Intelligence, which represents the highest consultative body, composed of renowned experts from Romania and abroad, offering the Romanian Government a significant contribution in terms of ethics and responsible use of artificial intelligence. Appointed by the Minister of Research, Innovation, and Digitalization

• EDITING ACTIVITIES

2024 – Editor-in-Chief – Frontiers in Robotics and AI (HRI Section)
2023 – Senior Editor – International Journal on Robotics Research (IJRR)
2012 – Associate Editor - International Journal of Social Robotics

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| 2017 – 2024 | Associate Editor – ACM Transaction on Human-Robot Interaction |
| 2016 – 2022 | Associate Editor – IEEE Transactions on Cognitive and Developmental Systems (TCDS) |
| 2014 – 2025 | Associate Editor, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) |
| 2024 – 2025 | Associate Editor, IEEE International Conference on Robotics and Automation (ICRA) |
| 2014 – 2015 | Editor, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) |
| 2011 – 2025 | Associate Editor, IEEE International Conference on Robot and Human Interactive Communication |
| 2020 – 2025 | Associate Editor, IEEE International Conference on Intelligent Transportation Systems (ITSC) |
| 2012 – 2020 | Program/Steering Committee, Human-Robot Interaction Conference (HRI) |

• CURRENT GRANTS

- Social awareness for service robots (SWEET), 2023 Marie-Curie Doctoral Networks results (2023-MSCA-DN), 2025 – 2028 (283 000€, ENSTA)
- Digital skills for Healthcare Transformation (DS4Health), 2021 DIGITAL-2021-SKILLS-01-SPECIALISED, 2023 – 2026 (1 600 000€, ENSTA)
- Robotics and AI for Critical Asset Monitoring (RAICAM), 2021 Marie-Curie Doctoral Networks results (2021-MSCA-DN), 2023 – 2026 (283 000€, ENSTA)

• PUBLICATIONS (more than 280 publication, h-index=37)

1. Hei, X., Zhang, H. and Tapus, A. (2025) "Estimating User Engagement in Human Robot Interaction Using a Dynamic Bayesian Network", In Proceedings of the 2025 IEEE International Conference on Robotics and Automation (ICRA), Atlanta, USA, May 2025
2. Marusic, A., Nguyen, S. M. and Tapus, A. (2025), "Skeleton-Based Transformer for Detection and Classification of Errors in Physical Rehabilitation Exercises", In Proceedings of the International Conference of Rehabilitation Robotics (ICORR 2025), Chicago USA, May 2025
3. Taourarti, I., Tapus, A., Monsuez, B., Guzman, J. I., Ramaswamy, A. (2025) "Cross-Cultural Analysis of Car-Following Dynamics: A Comparative Study of Open-Source Trajectory Datasets", 2025 IEEE Intelligent Vehicles Symposium (IV), Cluj-Napoca, Romania, June 2025
4. Zheng, Y., Yan, R., Jia, B., Jiang, R., Shang, Y., Tapus, A. (2025) "Adaptive Hybrid Car Following Strategy using Cooperative Adaptive Cruise Control and Deep Reinforcement Learning", Physica A: Statistical Mechanics and its Applications, May 2025
5. Zhegong, S., Xiao, H. El Mrhasli, Y., Nengchao, L., Tapus, A. (2025) "Factors influencing emotional driving: examining the impact of arousal on the interplay between age, personality, and driving behaviors", Frontiers in Psychology, doi:10.3389/fpsyg.2025.1487493
6. Garcia Cardenas, J.J., Hei, X., and Tapus, A. (2024) "Exploring Cognitive Load Dynamics in Human-Machine Interaction for Teleoperation: A User-Centric Perspective on Remote Operation System Design", In 2024 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), October 13-17, 2024, Abu Dhabi, UAE
7. Taourarti, I., Choudhary, A., Paswan, V. K., Kumar, A., Ramaswamy, A., Ibanez Guzman, J., Monsuez, B., Tapus, A. (2024) "Estimating Complexity for Perception-based ADAS in Unstructured Road Environments", The 35th IEEE Intelligent Vehicles Symposium, 2024 (IV2024), Jeju Island, South Korea, June, 2024
8. Yu, C., Zhang, H., Shangguan, Z., Hei, X., Cangelosi, A., and Tapus, A. (2022) "Speech-driven Robot Face Action Generation with Deep Generative Model for Social Robots", In Proceedings of International Conference of Social Robotics (ICSR) 2022, Florence, Italy, December 2022 (Finalist Best Paper Award)
9. Coşar, S., Fernandez-Carmona, M., Agrigoroaie, R. et al. "ENRICHME: Perception and Interaction of an Assistive Robot for the Elderly at Home", International Journal of Social Robotics 12, 779–805 (2020). <https://doi.org/10.1007/s12369-019-00614-y>
10. Agrigoroaie, R., and Tapus, A. (2019) "Analysis of the Variation of Physiological Parameters based on User's Personality, Sensory Profile, and Morningness-eveningness Type in a Human-Robot Interaction", International Journal on Social Robotics (IJSR), DOI: 10.1007/s12369-019-00532-z

• INVITED PRESENTATIONS

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| 2025 | Keynote Speaker, Geriatrics Summit, Robotics, and AI Technologies, Germany, July 2025 |
| 2025 | Keynote Speaker, Summit in AI and Vulnerability in the Robot Society, Norway, June 2025 |
| 2024 | Visiting Professor, University of Southern California (USC) and University of California San Diego (UCSD), USA, August 2024 |
| 2024 | Keynote Speaker, Robotics, AI and Society Symposium, Paris, France, June 2024 |
| 2023 | Keynote Speaker, Human Friendly Robotics (HFR) Workshop, Germany, September 2023 |
| 2023 | Visiting Professor, University of Tokyo and University of Kyoto, Japan August 2023 |
| 2022 | Keynote Speaker, Geriatrics Summit, Germany, June 2022 |
| 2021 | Invited Speaker, at the Inauguration of the International Center of Excellence in Artificial Intelligence, Romania, December 2021 |