

Radu-Daniel VATAVU

Curriculum vitae



Professor of Computer Science



Machine Intelligence and Information Visualization
Laboratory (MintViz) | MANSiD Research Center

Ștefan cel Mare University of Suceava

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<https://www.linkedin.com/in/radu-daniel-vatavu-1ab85798>



Married (2007), two children (2010 and 2014)



ACM Author Profile



DBLP Author Profile



ORCID (0000-0002-7631-6445)



Google Scholar



Research Gate



Springer Link Author



Scopus Author



ResearcherID

SUMMARY

- ❖ Scientific research in Human-Computer Interaction, Augmented and Extended Reality (AR/XR), Accessible Computing, Ambient Intelligence
- ❖ Head of the **Machine Intelligence and Information Visualization Research Lab** with an interdisciplinary team in Computer Science, Electronics, Psychology
- ❖ **200 published papers**, of which 141 archived in the Association for Computing Machinery (ACM) Digital Library, 194 in Scopus, and 129 in Web of Science
- ❖ **20 paper awards**, mainly from the ACM. Among these, the **10-Year Technical Impact Award** at ICMI 2022 and the **1st Place Blue Sky Awards** at ICMI 2023 and ICMI 2024
- ❖ Member of all major scientific committees of HCI and AR/MR venues (CHI, UIST, ISMAR)
- ❖ Scientific collaborations with **+112 co-authors**¹

EDUCATION

HDR (Habilitation to Direct Research) in Computer Science, 2015

- Thesis title: Designing Gesture Interaction by Understanding Users
- Defended at the Technical University of Cluj-Napoca, Romania in December 2014
- Scientific Committee: Prof. Sergiu Nedevschi, Prof. Lucian Vințan, Prof. Valentin Cristea

Ph.D. in Computer Science & Docteur en Informatique, 2008

- Thesis title: Real-time Human Gesture Acquisition for Interacting with Virtual Environments

¹<https://www.scopus.com/authid/detail.uri?origin=resultslist&authorId=24504604700&zone=#tab=co-authors>

- Co-directed thesis between University Lille 1, France and Ștefan cel Mare University of Suceava, Romania
- Advisors: Prof. Christophe Chaillou and Prof. Ștefan-Gheorghe Pentiu
- Scientific Committee: Prof. Christophe Chaillou, Prof. Ștefan-Gheorghe Pentiu, Dr. Radu Horaud, Prof. Dan Gâlea, Prof. Laurent Grisoni, Prof. Alexandru Valachi, Prof. Adrian Gaur
- Eiffel doctoral scholarship, Ministère des Affaires Etrangères, France (2005, declined for personal reasons)
- AUF doctoral scholarship, Agence Universitaire de la Francophonie (2005 – 2007)

 CUM LAUDE DISTINCTION

Engineer Diploma in Computer Science, 1999 – 2004

- Undergraduate dissertation title: Real-time Face Detection in Videos
- Faculty of Electrical Engineering and Computer Science, Ștefan cel Mare University of Suceava, Romania

 RANKED 1ST IN GRADUATING CLASS

Diploma in Economics, 1999 – 2003

- Undergraduate dissertation title: Applications of Neural Networks to Economic Forecasting
- Faculty of Economic Sciences and Administration, Ștefan cel Mare University of Suceava, Romania

ACADEMIC PROFESSIONAL EXPERIENCE

Professor of Computer Science, since February 2016

- Faculty of Electrical Engineering and Computer Science, Ștefan cel Mare University of Suceava, Romania
- Teaching Algorithms Design, Ambient Intelligence, Augmented Reality, Natural Human-Computer Interaction
- Research in HCI, AmI, AR/MR/XR, AmI, Accessible Computing, Entertainment Computing

Head of the [Machine Intelligence and Information Visualization Lab](#) since 2015

- Design and development of useful and usable interactions between humans, computers, and environments with advanced AI & InfoVis technology
- Team of 8 PhD students and 5 faculty members

Associate Professor of Computer Science, October 2014 – January 2016

- Faculty of Electrical Engineering and Computer Science, Ștefan cel Mare University of Suceava, Romania
- Teaching Algorithms Design, Advanced Programming Concepts, Pattern Recognition, Advanced Artificial Intelligence, Image Processing Systems

Assistant Professor & Lecturer in Computer Science, 2009 - 2014

- Faculty of Electrical Engineering and Computer Science, Ștefan cel Mare University of Suceava, Romania
- Teaching Algorithms Design, Advanced Programming Concepts, Pattern Recognition, Computer Network Programming, Introduction to Computer Programming
- Research in Human-Computer Interaction, Image Processing and Pattern Recognition

Ph.D. in Computer Science, October 2004 – March 2008

- University Lille 1, France & University Ștefan cel Mare of Suceava, Romania
- Scholarship awarded by Agence Universitaire de la Francophonie (AUF)

Invited/Visiting positions

- Université catholique de Louvain, Belgium (one week in Aug. 2022, Nov. 2019, Sep. 2018, June 2017)
- Beihang University, Beijing, China (one week in Oct. 2019, Aug. 2017)
- Technical University of Moldova, Republic of Moldova (one week in May 2017)
- Technical University of Vienna, Austria (one week in Sep. 2015, April 2014)
- University of Mons, Belgium (one week in Oct. 2013, July 2013, April 2013, Oct. 2012)
- INRIA Lille Nord Europe, France (two months, June – July 2011)
- University Lille 1, France (one month, May 2011)

PUBLICATIONS

ARTICLES IN JOURNALS

- J01. Mihail Terenti, **Radu-Daniel Vatavu**. (2024). Wear+Touch: An Exploration of Wearables for Vibrotactile Feedback During Touchscreen Input. *International Journal of Human-Computer Interaction*, 19 pages. Taylor & Francis. doi:10.1080/10447318.2024.2372145 **Q1**, IF: 3.4, 5-Year IF: 4.5 (JCR 2023)
- J02. Mihail Terenti, Cristian Pamparău, **Radu-Daniel Vatavu**. (2024). The User Experience of Distal Arm-Level Vibrotactile Feedback for Interactions with Virtual versus Physical Displays. *Virtual Reality* 28, Article no. 84, 21 pages, Springer. doi:10.1007/s10055-024-00977-2 **Q1**, IF=4.4, 5-Year IF=5.4 (JCR 2023)
- J03. Adrian Aiordăchioae, Cristian Pamparău, **Radu-Daniel Vatavu**. (2024). Lifelogging Meets Alternate and Cross-Realities: An Investigation into Broadcasting Personal Visual Realities to Remote Audiences. *Multimedia Tools and Applications* 83, 46707-46730, Springer. doi:10.1007/s11042-021-11310-3 **Q2**, IF: 3.0, 5-Year IF: 2.9 (JCR 2023)
- J04. **Radu-Daniel Vatavu**, Petruta-Paraschiva Rusu, Ovidiu-Andrei Schipor, Maria-Doina Schipor. (2024). Preferences of People with Visual Impairments for Augmented and Mediated Vision: A Vignette Experiment. *Multimedia Tools and Applications* 83, 46531-46556. Springer. doi:10.1007/s11042-021-11498-4 **Q2**, IF: 3.0, 5-Year IF: 2.9 (JCR 2023)
- J05. Santiago Villarreal-Narvaez, Arthur Sluÿters, Jean Vanderdonck, **Radu-Daniel Vatavu**. (2024). Brave New GES World: A Systematic Literature Review of Gestures and Referents in Gesture Elicitation Studies. *ACM Computing Surveys* 56(5), Article no. 128, 55 pages, ACM. doi:10.1145/3636458 **Q1**, IF: 23.8, 5-Year IF: 21.1 (JCR 2023)
- J06. Alexandru-Ionuț Șean, Cristian Pamparău, Arthur Sluÿters, **Radu-Daniel Vatavu**, Jean Vanderdonck. (2023). Flexible Gesture Input with Radars: Systematic Literature Review and Taxonomy of Radar Sensing Integration in Ambient Intelligence Environments. *Journal of Ambient Intelligence and Humanized Computing* 14, 7967–7981, Springer. doi:10.1007/s12652-023-04606-9
- J07. Arthur Sluÿters, Sébastien Lambot, Jean Vanderdonck, **Radu-Daniel Vatavu**. (2023). RadarSense: Accurate Recognition of Mid-Air Hand Gestures with Radar Sensing and Few Training Examples. *ACM Transactions on Interactive Intelligent Systems* 13(3), 16:1-16:45, ACM. doi:10.1145/3589645 **Q2**, IF: 3.6, 5-Year IF: 3.8 (JCR 2023)
- J08. Cristian Pamparău, Ovidiu-Andrei Schipor, Alexandru Dancu, **Radu-Daniel Vatavu**. (2023). SAPIENS in XR: Operationalizing Interaction-Attention in Extended Reality. *Virtual Reality* (27), 1765-1781, Springer. doi:10.1007/s10055-023-00776-1 **Q1**, IF=4.4, 5-Year IF=5.4 (JCR 2023)
- J09. Laura-Bianca Bilius, Ștefan-Gheorghe Pentiu, **Radu-Daniel Vatavu**. (2023). TIGER: A Tucker-based Instrument for Gesture Recognition with Inertial Sensors. *Pattern Recognition Letters* 165, 84-90, Elsevier. doi:10.1016/j.patrec.2022.11.028 **Q2**, IF: 3.9, 5-Year IF: 4.2 (JCR 2023)
- J10. Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**. (2023). GearWheels: A Software Tool to Support User Experiments on Gesture Input with Wearable Devices. *International Journal of Human-Computer Interaction* 39(18), 3527-3545, Taylor & Francis. doi:10.1080/10447318.2022.2098907 **Q1**, IF: 3.4, 5-Year IF: 4.5 (JCR 2023)
- J11. Mihail Terenti, **Radu-Daniel Vatavu**. (2023). VIREO: Web-based Graphical Authoring of Vibrotactile Feedback for Interactions with Mobile and Wearable Devices. *International Journal of Human-Computer Interaction* 39(20), 4162-4180, Taylor & Francis. doi:10.1080/10447318.2022.2109584 **Q1**, IF: 3.4, 5-Year IF: 4.5 (JCR 2023)
- J12. Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu**. (2022). "I Gave up Wearing Rings:" Insights on the Perceptions and Preferences of Wheelchair Users for Interactions with Wearables. *IEEE Pervasive Computing* 21(3). IEEE, USA, 92-101. doi:10.1109/MPRV.2022.3155952 IF: 1.6, 5-Year IF: 4.2 (JCR 2022)
- BEST PAPER AWARD**
- J13. Adrian Aiordăchioae, **Radu-Daniel Vatavu**. (2022). LifeTags++: A Multi-User, Multi-Device, and Multi-Perspective System for Recording and Abstracting Visual Life with Tag Clouds. *Romanian Journal of Information Science and Technology* 25(1), 80-91. doi:www.romjist.ro/contents-88 **Q2**, IF: 3.5, 5-Year IF: 1.8 (JCR 2022)

- J14. **Radu-Daniel Vatavu**, Jacob O. Wobbrock. (2022). Clarifying Agreement Calculations and Analysis for End-User Elicitation Studies. *ACM Transactions on Computer-Human Interaction* 29(1). ACM, 5:1-5:70. doi:10.1145/3476101 **Q2**, IF:3.7, 5-Year IF: 4.6 (JCR 2022)
- J15. Arthur Sluÿters, Jean Vanderdonckt, **Radu-Daniel Vatavu**. (2021). Engineering Slidable Graphical User Interfaces with Slime. *Proc. of the ACM on Human-Computer Interaction* 5 (EICS), 200:1-200:29, ACM. doi:10.1145/3457147
- J16. Jean Vanderdonckt, **Radu-Daniel Vatavu**. (2021). Extensible, Extendable, Expandable, Extractable: The 4E Design Approach for Reconfigurable Displays. *International Journal of Human-Computer Interaction*, Taylor & Francis. doi:10.1080/10447318.2021.1908666 **Q1**, IF: 4.920, 5-Year IF: 4.503 (JCR 2021)
- J17. Cristian Pamparău, **Radu-Daniel Vatavu**. (2021). FlexiSee: Flexible Configuration, Customization, and Control of Mediated and Augmented Vision for Users of Smart Eyewear Devices. *Multimedia Tools and Applications* 80, 30943-30968, Springer. doi:10.1007/s11042-020-10164-5 **Q2**, IF: 2.577, 5-Year IF: 2.396 (JCR 2021)
- J18. Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**. (2021). Empirical Results for High-definition Video and Augmented Reality Content Delivery in Hyper-connected Cars. *Interacting with Computers* 33 (1), 3-16, Oxford University Press, the British Computer Society. doi:10.1093/iwcomp/iwaa025 IF: 1.623, 5-Year IF: 1.532 (JCR 2021)
- J19. Laura-Bianca Bilius, **Radu-Daniel Vatavu**. (2021). A Multistudy Investigation of Drivers and Passengers' Gesture and Voice Input Preferences for In-Vehicle Interactions. *Journal of Intelligent Transportation Systems* 25(2), 197-220. Taylor & Francis. doi:10.1080/15472450.2020.1846127 **Q2**, IF: 3.839, 5-Year IF: 4.318 (JCR 2021)
- J20. Octav Opaschi, **Radu-Daniel Vatavu**. (2020). Uncovering Practical Security and Privacy Threats for Connected Glasses with Embedded Video Cameras. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies* 4(4), Article no. 167, 26 pages, ACM. doi:10.1145/3432700
- J21. Luis A. Leiva, **Radu-Daniel Vatavu**, Daniel Martín-Albo, Réjean Plamondon. (2020). Omnis Praedictio: Estimating the Full Spectrum of Human Performance with Stroke Gestures. *International Journal of Human-Computer Studies* 142, 102466, Elsevier. doi:10.1016/j.ijhcs.2020.102466 **Q1**, IF: 3.632, 5-Year IF: 3.848 (JCR 2020)
- J22. **Radu-Daniel Vatavu**. (2020). Connecting Research from Assistive Vision and Smart Eyewear Computing with Crisis Management and Mitigation Systems: A Position Paper. *Romanian Journal of Information Science and Technology* 23(S), 29-39. doi:www.romjist.ro/contents-80 IF: 0.643, 5-Year IF: 0.590 (JCR 2020)
- J23. Irina Popovici, Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**. (2019). Hover: Exploring Cognitive Maps and Mid-Air Pointing for Television Control. *International Journal of Human-Computer Studies* 129, 95-107, Elsevier. doi:10.1016/j.ijhcs.2019.03.012 **Q1**, IF: 3.163, 5-Year IF: 3.383 (JCR 2019)
- J24. Víctor Manuel López Jaquero, **Radu-Daniel Vatavu**, Jose Ignacio Panach, Oscar Pastor, Jean Vanderdonckt. (2019). A Newcomer's Guide to EICS, the Engineering Interactive Computing Systems Community. *Proceedings of the ACM on Human-Computer Interaction* 3(EICS), 1:1-1:9, ACM. doi:10.1145/3300960
- J25. Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**, Wenjun Wu. (2019). SAPIENS: Towards Software Architecture to Support Peripheral Interaction in Smart Environments. *Proceedings of the ACM on Human-Computer Interaction* 3(EICS), Article no. 11, 24 pages, ACM. doi:10.1145/3331153
- J26. Adrian Aiordăchioae, **Radu-Daniel Vatavu**. (2019). Life-Tags: A Smartglasses-based System for Recording and Abstracting Life with Tag Clouds. *Proceedings of the ACM on Human-Computer Interaction* 3(EICS), Article no. 15, 22 pages, ACM. doi:10.1145/3331157
- J27. Jean Vanderdonckt, Mathieu Zen, **Radu-Daniel Vatavu**. (2019). AB4Web: An On-Line A/B Tester for Comparing User Interface Design Alternatives. *Proceedings of the ACM on Human-Computer Interaction* 3(EICS), Article no. 18, 28 pages, ACM. doi:10.1145.3331160
- HONORABLE MENTION AWARD**
- J28. Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**, Jean Vanderdonckt. (2019). Euphoria: A Scalable, Event-driven Architecture for Designing Interactions across Heterogeneous Devices in Smart Environments. *Inf. and Software Technology* 109, 43-59, Elsevier. doi:10.1016/j.infsof.2019.01.006 **Q2**, IF: 2.726, 5-Year IF: 3.130 (JCR 2019)
- J29. Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**. (2018). Invisible, Inaudible, and Impalpable: Users' Preferences and Memory Performance for Digital Content in Thin Air. *IEEE Pervasive Computing* 17(4), 76-85, IEEE. doi:10.1109/MPRV.2018.2873856 **Q1**, IF: 3.813, 5-Year IF: 4.123 (JCR 2018)

- J30. **Radu-Daniel Vatavu**, Bogdan-Florin Gheran, Maria-Doina Schipor. (2018). The Impact of Low Vision on Touch Gesture Articulation on Mobile Devices. *IEEE Pervasive Computing* 17(1), 27-37, IEEE. doi:10.1109/MPRV.2018.011591059 **Q1**, IF: 3.813, 5-Year IF: 4.123 (JCR 2018)
- J31. **Radu-Daniel Vatavu**. (2017). Characterizing Gesture Knowledge Transfer across Multiple Contexts of Use. *Journal on Multimodal User Interfaces* 11(4), 301-314, Springer. doi:10.1007/s12193-017-0247-x IF: 1.140, 5-Year IF: 0.872 (JCR 2017)
- J32. **Radu-Daniel Vatavu**. (2017). Smart-Pockets: Body-Deictic Gestures for Fast Access to Personal Data during Ambient Interactions. *International Journal of Human-Computer Studies* 103, 1-21, Elsevier.  doi:10.1016/j.ijhcs.2017.01.005 **Q1**, IF: 2.300, 5-Year IF: 2.224 (JCR 2017)
- 2017 "RESEARCH of EXCELLENCE" AWARD from UEFISCDI, ROMANIA**
- 2019 "MIHAI DRĂGANESCU" AWARD of the ROMANIAN ACADEMY**
- J33. **Radu-Daniel Vatavu**. (2017). Beyond Features for Recognition: Human-Readable Measures to Understand Users' Whole-Body Gesture Performance. *International Journal of Human-Computer Interaction* 33(9), 713-730, Taylor & Francis. doi: 10.1080/10447318.2017.1278897 IF: 1.259, 5-Year IF: 1.579 (JCR 2017)
- J34. **Radu-Daniel Vatavu**. (2017). Visual Impairments and Mobile Touchscreen Interaction: State-of-the-Art, Causes of Visual Impairment, and Design Guidelines. *International Journal of Human-Computer Interaction* 33(6), 486-509, Taylor & Francis. doi:10.1080/10447318.2017.1279827 IF: 1.259, 5-Year IF: 1.579 (JCR 2017)
- J35. Yihua Lou, Wenjun Wu, **Radu-Daniel Vatavu**, Wei-Tek Tsai. (2017). Personalized Gesture Interactions for Cyber-Physical Smart-Home Environments. *Science China Information Sciences* 60(7), 072104:1-15, Science China Press & Springer. doi: 10.1007/s11432-015-1014-7 **Q2**, IF: 2.188, 5-Year IF: 1.329 (JCR 2017)
- J36. Ovidiu-Andrei Schipor, Wenjun Wu, Wei-Tek Tsai, **Radu-Daniel Vatavu**. (2017). Software Architecture Design for Spatially-Indexed Media in Smart Environments. *Advances in Electrical and Computer Engineering* 17(2), 17-22. doi: 10.4316/AECE.2017.02003 IF: 0.699, 5-Year IF: 0.674 (JCR 2017)
- J37. **Radu-Daniel Vatavu**, Matei Mancaş. (2015). Evaluating Visual Attention for Multi-Screen Television: Measures, Toolkit, and Experimental Findings. *Personal and Ubiquitous Computing* 19(5-6), 781-801, Springer. doi:10.1007/s00779-015-0862-z **Q2**, IF: 1.498, 5-Year IF: 1.708 (JCR 2015)
- J38. Ionuț-Alexandru Zaiți, Ștefan-Gheorghe Pentiu, **Radu-Daniel Vatavu**. (2015). On Free-Hand TV Control: Experimental Results on User-Elicited Gestures with Leap Motion. *Personal and Ubiquitous Computing* 19(5-6), 821-838, Springer. doi:10.1007/s00779-015-0863-y **Q2**, IF: 1.498, 5-Year IF: 1.708 (JCR 2015)
- J39. **Radu-Daniel Vatavu**, Gabriel Cramariuc, Doina Maria Schipor. (2015). Touch Interaction for Children Aged 3 to 6 Years: Experimental Findings and Relationship to Motor Skills. *International Journal of Human-Computer Studies* 74, 54-76, Elsevier. doi:10.1016/j.ijhcs.2014.10.007 **Q1**, IF: 1.476, 5-Year IF: 2.097 (JCR 2015)
- J40. **Radu-Daniel Vatavu**, Ionut-Alexandru Zaiți. (2013). Automatic Recognition of Object Size and Shape via User-Dependent Measurements of the Grasping Hand. *International Journal of Human-Computer Studies* 71(5), 590-607, Elsevier. doi:10.1016/j.ijhcs.2013.01.002 **Q1**, IF: 1.165, 5-Year IF: 1.942 (JCR 2013)
- J41. **Radu-Daniel Vatavu**. (2013). The Impact of Motion Dimensionality and Bit Cardinality on the Design of 3D Gesture Recognizers. *International Journal of Human-Computer Studies* 71(4), 387-409, Elsevier. doi:10.1016/j.ijhcs.2012.11.005 **Q1**, IF: 1.165, 5-Year IF: 1.942 (JCR 2013)
- J42. **Radu-Daniel Vatavu**. (2013). A Comparative Study of User-Defined Handheld vs. Freehand Gestures for Home Entertainment Environments. *Journal of Ambient Intelligence and Smart Environments* 5(2), 187-211, IOS Press. doi:10.3233/AIS-130200 **Q2**, IF: 1.082, 5-Year IF: 1.252 (JCR 2013)
- J43. Bogdan Pogorelc, Artur Lugmayr, Bjorn Stockleben, **Radu-Daniel Vatavu**, Nina Tahmasebi, Estefania Serral, Emilija Stojmenova, Bojan Imperl, Thomas Risse, Gideon Zenz, Matjaz Gams. (2013). Ambient Bloom: New Business, Content, Design and Models to Increase the Semantic Ambient Media Experience. *Multimedia Tools and Applications*, 66(1), 7-32, Springer. doi:10.1007/s11042-012-1228-4 **Q2**, IF: 1.058, 5-Year IF: 1.039 (JCR 2013)




- J44. **Radu-Daniel Vatavu.** (2013). On Designing Interactivity Awareness for Ambient Displays. *Multimedia Tools and Applications*, 66(1), 59-80, Springer. doi:10.1007/s11042-012-1140-y **Q2**, IF: 1.058, 5-Year IF: 1.039 (JCR 2013)
- J45. **Radu-Daniel Vatavu.** (2012). Nomadic Gestures: A Technique for Reusing Gesture Commands for Frequent Ambient Interactions. *Journal of Ambient Intelligence and Smart Environments*, 4(2), 79-93, IOS Press. doi:10.3233/AIS-2012-0137 **Q2**, IF: 1.298, 5-Year IF: 1.640 (JCR 2012)
- J46. **Radu-Daniel Vatavu.** (2012). Point & Click Mediated Interactions for Large Home Entertainment Displays. *Multimedia Tools and Applications* 59, 113-128, Springer. doi:10.1007/s11042-010-0698-5 **Q2**, IF: 1.014, 5-Year IF: 0.932 (JCR 2012)
- J47. Bogdan Pogorelc, **Radu-Daniel Vatavu**, Artur Lugmayr, Bjorn Stockleben, Thomas Risse, Juha Kaario, Estefania Constanza Lomonaco, Matjaz Gams. (2012). Semantic Ambient Media: From Ambient Advertising to Ambient-Assisted Living. *Multimedia Tools and Applications* 58(2), 399-425, Springer. doi:10.1007/s11042-011-0917-8 **Q2**, IF: 1.014, 5-Year IF: 0.932 (JCR 2012)
- J48. **Radu-Daniel Vatavu.** (2012). Presence Bubbles: Supporting and Enhancing Human-Human Interaction with Ambient Media. *Multimedia Tools and Applications* 58(2), 371-383, Springer. doi:10.1007/s11042-010-0674-0 **Q2**, IF: 1.014, 5-Year IF: 0.932 (JCR 2012)
- J49. Remus-Cătălin Prodan, Ștefan-Gheorghe Pentiu, **Radu-Daniel Vatavu.** (2012). An Efficient Solution for Hand Gesture Recognition from Video Sequence. *Advances in Electrical and Computer Engineering* 12(3), 85-88. doi:10.4316/AECE.2012.03013 IF: 0.552, 5-Year IF: 0.479 (JCR 2012)
- J50. Cristian Andy Tănase, **Radu-Daniel Vatavu**, Ștefan-Gheorghe Pentiu, Adrian Graur. (2008). Detecting and Tracking Multiple Users in the Proximity of Interactive Tabletops. *Advances in Electrical and Computer Engineering* 8(2), 61-64. doi:10.4316/AECE.2008.02011 IF: 0.509 (JCR 2009)
- J51. **Radu-Daniel Vatavu**, Ștefan-Gheorghe Pentiu, Laurent Grisoni, Christophe Chaillou. (2008). Modeling Shapes for Pattern Recognition: A Simple Low-Cost Spline-based Approach. *Advances in Electrical and Computer Engineering* 8(1), 67-71. doi:10.4316/AECE.2008.01012 IF: 0.509 (JCR 2009)
- J52. **Radu-Daniel Vatavu**, Ștefan-Gheorghe Pentiu. (2008). Multi-Level Representation of Gesture as Command for Human-Computer Interaction. *Computing and Informatics* 27(6). Slovak Academy of Sciences, 837-851. doi:www.cai.sk/ojs/index.php/cai/article/viewArticle/16 IF: 0.492, 5-Year IF: 0.421 (JCR 2008)
- J53. Adriana Băcilă, Xavier Decoopman, **Radu-Daniel Vatavu**, G. Mesmacque, M. Vodă, V.A. Șerban. (2007). Computer Simulation of Fatigue Crack Propagation under Random Loading Conditions. *International Journal of Fatigue* 29(9-11), 1772-1780, Elsevier. doi:10.1016/j.ijfatigue.2007.02.026 **Q1**, IF: 1.117, 5-Year IF: 1.501 (JCR 2007)
- J54. **Radu-Daniel Vatavu**, Ștefan-Gheorghe Pentiu, Christophe Chaillou. (2005). On Natural Gestures for Interacting in Virtual Environments. *Advances in Electrical and Computer Engineering* 5(2), 72-79. <http://www.aece.ro/abstractplus.php?year=2005&number=2&article=10>
- J55. **Radu-Daniel Vatavu**, Laurent Grisoni, Samuel Degrande, Cristophe Chaillou, Ștefan-Gheorghe Pentiu. (2005). Adaptive Skin Color Detection in Unconstrained Environments using 2D Histogram Partitioning. *Advances in Electrical and Computer Engineering* 5(1), 101-105. <http://www.aece.ro/abstractplus.php?year=2005&number=1&article=17>


CONFERENCE PAPERS

Note: All venues listed in this section are peer-reviewed and archival. Top-tier venues, e.g., CHI, ISMAR, UIST, etc., are extremely selective with acceptance rates between 20% and 30%. CHI is the premier conference of Human-Computer Interaction, the flagship conference of ACM SIGCHI,² and ranked first in the "Top publications of Human-Computer Interaction."³ Venues ranked **A***, **A**, and **B** by **ARC CORE** (Computing Research & Education) are also highlighted.

² <http://www.sigchi.org/conferences>

³ https://scholar.google.com/citations?view_op=top_venues&vq=eng_humancomputerinteraction

- C01. **Radu-Daniel Vatavu.** (2024). AI as Modality in Human Augmentation: Toward New Forms of Multimodal Interaction with AI-Embodied Modalities. *Proceedings of ICMI '24, the 26th International Conference on Multimodal Interaction*, 591-595. ACM. doi:10.1145/3678957.3678958 AR: 1/9=11.1% | **ARC B**
1ST PLACE BLUE SKY PAPER AWARD (the Blue Sky track emphasizes innovative, high-risk controversial ideas)
- C02. Laura-Bianca Bilius, Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu.** (2024). The Age-Reward Perspective: A Systematic Review of Reward Mechanisms in Serious Games for Older People. *Proceedings of IMX '24, the ACM International Conference on Interactive Media Experiences*, 168-181. ACM. doi:10.1145/3639701.3656327 AR: 26/66=39.4%
- C03. Laura-Bianca Bilius, Alexandru-Tudor Andrei, **Radu-Daniel Vatavu.** (2024). From Smart Buildings to Smart Vehicles: Mobile User Interfaces for Multi-Environment Interactions. *Proceedings of DAS '24, the 17th International Conference on Development and Application Systems*, 152-155. IEEE. doi:10.1109/DAS61944.2024.10541208
- C04. Alexandru-Tudor Andrei, Laura-Bianca Bilius, **Radu-Daniel Vatavu.** (2024). Take a Seat, Make a Gesture: Charting User Preferences for On-Chair and From-Chair Gesture Input. *Proceedings of CHI '24, the CHI Conference on Human Factors in Computing Systems*, Article no. 555, 17 pages. ACM. doi:10.1145/3613904.3642028 AR: 1058/4028=26.3% | **ARC A***
- C05. Adrian-Vasile Catană, **Radu-Daniel Vatavu.** (2024). Fingerhinter Takes Center Stage: User Experience Insights from Informal Encounters with a Finger-Augmentation Device. *Proceedings of AIXVR '24, the 6th IEEE International Conference on Artificial Intelligence and eXtended and Virtual Reality*, 265-269, IEEE. doi:10.1109/AIXVR59861.2024.00044
- C06. **Radu-Daniel Vatavu.** (2023). From Natural to Non-Natural Interaction: Embracing Interaction Design Beyond the Accepted Convention of Natural. *Proceedings of ICMI '23, the 25th ACM International Conference on Multimodal Interaction*, 684-688, ACM. doi:10.1145/3577190.3616122 AR: 1/16=6.3% | **ARC B**
 **1ST PLACE BLUE SKY PAPER AWARD** (the Blue Sky track emphasizes innovative, high-risk controversial ideas)
- C07. Milad Jamalzadeh, Yosra Rekik, Laurent Grisoni, **Radu-Daniel Vatavu,** Gualtiero Volpe, Alexandru Dancu. (2023). Effects of Moving Speed and Phone Location on Eyes-Free Gesture Input with Mobile Devices. *Proceedings of INTERACT '23, the 19th IFIP International Conference on Human-Computer Interaction*, 469-478, Springer. doi:10.1007/978-3-031-42280-5_30 AR: 18/58=31.0% | **ARC B**
- C08. **Radu-Daniel Vatavu.** (2023). Leveraging Sensorimotor Realities for Assistive Technology Design Bridging Smart Environments and Virtual Worlds. *Proc. of PETRA '23, the 16th Int. Conf. on Pervasive Technologies Related to Assistive Environments*, 247-253, ACM. doi:10.1145/3594806.3594834 AR: 79/153=51.6%
- C09. Alexandre Nevsky, Timothy Neate, **Radu-Daniel Vatavu,** Elena Simperl. (2023). Accessibility Research in Digital Audiovisual Media: What Has Been Achieved and What Should Be Done Next? *Proceedings of IMX '23, the ACM Int. Conf. on Interactive Media Experiences*, 96-114, ACM. doi:10.1145/3573381.3596159 AR: 14/36=38.9%
 **HONORABLE MENTION AWARD**
- C10. Adrian-Vasile Catană, **Radu-Daniel Vatavu.** (2023). Fingerhints: Understanding Users' Perceptions of and Preferences for On-Finger Kinesthetic Notifications. *Proceedings of CHI '23, the CHI Conference on Human Factors in Computing Systems*, Article No. 518, 17 pages, ACM. doi:10.1145/3544548.3581022 AR: 879/3182=27.6% | **ARC A***
- C11. Laura-Bianca Bilius, Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu.** (2023). Understanding Wheelchair Users' Preferences for On-Body, In-Air, and On-Wheelchair Gestures. *Proceedings of CHI '23, the CHI Conference on Human Factors in Computing Systems*, Article No. 78, 16 pages, ACM. doi:10.1145/3544548.3580929 AR: 879/3182=27.6% | **ARC A***
 **HONORABLE MENTION AWARD**

- C12.  **Radu-Daniel Vatavu.** (2023). iFAD Gestures: Understanding Users' Gesture Input Performance with Index-Finger Augmentation Devices. *Proceedings of CHI '23, the CHI Conference on Human Factors in Computing Systems*, Article No. 576, 17 pages, ACM. doi:10.1145/3544548.3580928 AR: 879/3182=27.6% | **ARC A***

HONORABLE MENTION AWARD

- C13. **Radu-Daniel Vatavu.** (2022). Sensorimotor Realities: Formalizing Ability-Mediating Design for Computer-Mediated Reality Environments. *Proceedings of ISMAR '22, the 21st IEEE International Symposium on Mixed and Augmented Reality*, 685-694, IEEE. doi:10.1109/ISMAR55827.2022.00086 AR: 93/441=21.1% | **ARC A***
- C14. **Radu-Daniel Vatavu,** Ovidiu-Ciprian Ungurean, Laura-Bianca Bilius. (2022). Interactive Public Displays and Wheelchair Users: Between Direct, Personal and Indirect, Assisted Interaction. *Proceedings of UIST '22, the 35th Annual ACM Symposium on User Interface Software and Technology*, Article No. 45, 17 pages, ACM. doi:10.1145/3526113.3545662 AR: 98/372=26.3% | **ARC A***
- C15. Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu.** (2022). Ability-Centered Examination of People with Motor Impairments' Interaction with Television Towards More Accessible Smart Home Entertainment Environments. *Proceedings of ISAmI '22, the 13th International Symposium on Ambient Intelligence* (LNNS 603), 32-43, Springer. doi:10.1007/978-3-031-22356-3_4
- C16. Cristian Pamparău, **Radu-Daniel Vatavu.** (2022). The User Experience of Journeys in the Realm of Augmented Reality Television. *Proceedings of IMX '22, the ACM International Conference on Interactive Media Experiences*, 161-174, ACM. doi:10.1145/3505284.3529969 AR: 19/47=40.4%
- C17. **Radu-Daniel Vatavu.** (2022). Possi(A)bilities: Augmented Reality Experiences of Possible Motor Abilities Enabled by a Video-Projected Virtual Hand. *Proceedings of ISEA '22, the 27th International Symposium on Electronic Art*, 825-828. doi:10.7238/ISEA2022.Proceedings AR: 308/1100=28.0%
- C18. Bogdan-Florin Gheran, Santiago Villarreal-Narvaez, **Radu-Daniel Vatavu,** Jean Vanderdonck. (2022). RepliGES and GEStory: Visual Tools for Systematizing and Consolidating Knowledge on User-Defined Gestures. *Proceedings of AVI '22, the International Conference on Advanced Visual Interfaces*, Article no. 5, 9 pages, ACM. doi:10.1145/3531073.3531112 AR: 15/62=24.2% (LONG PAPERS) | **ARC B**
- C19. Bogdan Popoveniuc, **Radu-Daniel Vatavu.** (2022). Transhumanism as a Philosophical and Cultural Framework for Extended Reality Applied to Human Augmentation. *Proceedings of AH '22, the 13th Augmented Human International Conference*, Article 6, 8 pages, ACM. doi:10.1145/3532525.3532528
- C20. Ovidiu-Andrei Schipor, Laura-Bianca Bilius, **Radu-Daniel Vatavu.** (2022). WearSkill: Personalized and Interchangeable Input with Wearables for Users with Motor Impairments. *Proceedings of W4A '22, the 19th Web for All Conference*, Article no. 10, 5 pages, ACM. doi:10.1145/3493612.3520455
- C21. **Radu-Daniel Vatavu,** Ovidiu-Ciprian Ungurean. (2022). Gesture Input Articulation with Upper-Body Wearables for Users with Upper-Body Motor Impairments. *Proc. of CHI '22, the ACM Conference on Human Factors in Computing Systems*, Article no. 2, 16 pages, ACM. doi:10.1145/3491102.3501964 AR: 637/2579=24.7% | **ARC A***
- C22. **Radu-Daniel Vatavu,** Ovidiu-Andrei Schipor. (2021). Formalizing Digital Proprioception for Devices, Environments, and Users. *Proceedings of ISAmI '21, the 12th International Symposium on Ambient Intelligence* (LNNS 483), 1-10, Springer. doi:10.1007/978-3-031-06894-2_1
- C23. Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu.** (2021). Users with Motor Impairments' Preferences for Smart Wearables to Access and Interact with Ambient Intelligence Applications and Services. *Proc. of ISAmI '21, the 12th Int. Symposium on Ambient Intelligence* (LNNS 483), 11-21, Springer. doi:10.1007/978-3-031-06894-2_2

BEST APPLICATION PAPER AWARD

- C24. Alexandru-Ionuț Șean, Laura-Bianca Bilius, **Radu-Daniel Vatavu.** (2021). Assistive Technology in the Synchrony Between Ambient Intelligence and Mixed Reality for People with Motor Disabilities. *Proceedings of ISAmI '21, the 12th International Symposium on Ambient Intelligence* (LNNS 483), 22-33, Springer. doi:10.1007/978-3-031-06894-2_3
- C25. Alexandru-Ionuț Șean, **Radu-Daniel Vatavu.** (2021). Wearable Interactions for Users with Motor Impairments: Systematic Review, Inventory, and Research Implications. *Proceedings of ASSETS '21, the 23rd International*

ACM SIGACCESS Conference on Computers and Accessibility, Article 7, 15 pages, ACM.

doi:10.1145/3441852.3471212 AR: 36/124=29% | **ARC A**

- C26. **Radu-Daniel Vatavu**, Laura-Bianca Bilius. (2021). GestuRING: A Web-based Tool for Designing Gesture Input with Rings, Ring-Like, and Ring-Ready Devices. *Proc. of UIST '21, the 34th Annual ACM Symposium on User Interface Software and Technology*, 710-723, ACM. doi:10.1145/3472749.3474780 AR: 95/367=25.9% | **ARC A***
- C27. Laura-Bianca Bilius, **Radu-Daniel Vatavu**, Nicolai Marquardt. (2021). Smart Vehicle Proxemics: A Conceptual Framework Operationalizing Proxemics in the Context of Outside-the-Vehicle Interactions. *Proceedings of INTERACT '21, the 18th IFIP TC13 International Conference on Human-Computer Interaction*. LNCS 12933, 150-171, Springer. doi:10.1007/978-3-030-85616-8_11 AR: 105/362=29% | **ARC B**
- C28. Laura-Bianca Bilius, **Radu-Daniel Vatavu**, Nicolai Marquardt. (2021). Exploring Application Opportunities for Smart Vehicles in the Continuous Interaction Space Inside and Outside the Vehicle. *Proceedings of INTERACT '21, the 18th IFIP TC13 International Conference on Human-Computer Interaction*. LNCS 129333, 140-140, Springer. doi:10.1007/978-3-030-85616-8_10 AR: 72/240=30% | **ARC B**
- C29. Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu**. (2021). Coping, Hacking, and DIY: Reframing the Accessibility of Interactions with Television for People with Motor Impairments. *Proceedings of IMX '21, the ACM International Conference on Interactive Media Experiences*, 37-49, ACM. doi:10.1145/3452918.3458802 AR: 17/40=42.5%
- C30. Irina Popovici, **Radu-Daniel Vatavu**, Pu Feng, Wenjun Wu. (2021). AR-TV and AR-Diànshì: Cultural Differences in Users' Preferences for Augmented Reality Television. *Proceedings of IMX '21, the ACM International Conference on Interactive Media Experiences*, 50-60, ACM. doi:10.1145/3452918.3458801 AR: 17/40=42.5%



BEST PAPER AWARD

- C31. Cristian Pamparău, **Radu-Daniel Vatavu**, Andrei R. Costea, Răzvan Jurchiș, Adrian Opre. (2021). MR4ISL: A Mixed Reality System for Psychological Experiments Focused on Social Learning and Social Interactions. *Companion of EICS '21, the 2021 ACM SIGCHI Symposium on Engineering Interactive Computing Systems*, 26-31, ACM. doi:10.1145/3459926.3464762 AR: 6/13=46.1%
- C32. **Radu-Daniel Vatavu**, Jean Vanderdonckt. (2020). Design Space and Users' Preferences for Smartglasses Graphical Menus: A Vignette Study. *Proceedings of MUM '20, the 19th International Conference on Mobile and Ubiquitous Multimedia*, 1-12, ACM. doi:10.1145/3428361.3428467 AR: 32/82=39.0%
- C33. Adrian Aiordăchioae, Daniel Furtună, **Radu-Daniel Vatavu**. (2020). Aggregating Life Tags for Opportunistic Crowdsensing with Mobile and Smartglasses Users. *Proceedings of GoodTechs '20, the 6th EAI International Conference on Smart Objects and Technologies for Social Good*, 66-71. doi:10.1145/3411170.3411237
- C34. Santiago Villarreal, Jean Vanderdonckt, **Radu-Daniel Vatavu**, Jacob O. Wobbrock. (2020). A Systematic Review of Gesture Elicitation Studies: What Can We Learn from 216 Studies? *Proc. of DIS '20, the 15th ACM Int. Conf. on Designing Interactive Systems*, 855-872, ACM. doi:10.1145/3357236.3395511 AR: 139/578=24.0% | **ARC B**
- C35. **Radu-Daniel Vatavu**, Pejman Saeghe, Teresa Chambel, Vinoba Vinayagamoorthy, Marian F. Ursu. (2020). Conceptualizing Augmented Reality Television for the Living Room. *Proc. of IMX '20, the ACM International Conference on Interactive Media Experiences*, 14 pages, ACM. doi:10.1145/3391614.3393660 AR: 13/50=26.0%



HONORABLE MENTION AWARD

- C36. Jean Vanderdonckt, Iyad Khaddam, **Radu-Daniel Vatavu**. (2020). The Foldinterface Editor: A Visual Tool for Designing User Interfaces for Foldable Displays. *Proceedings of EICS '20, the 12th ACM SIGCHI Symposium on Engineering Interactive Computing Systems*, Article no. 1, 6 pages, ACM. doi:10.1145/3393672.3398490
- C37. Jean Vanderdonckt, **Radu-Daniel Vatavu**. (2020). A Pen User Interface for Controlling a Virtual Puppet. *Proceedings of EICS '20, the 12th ACM SIGCHI Symposium on Engineering Interactive Computing Systems*, Article no. 6, 6 pages, ACM. doi:10.1145/3393672.3398637
- C38. Adrian Aiordăchioae, Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**. (2020). An Inventory of Voice Input Commands for Users with Visual Impairments and Assistive Smartglasses Applications. *Proceedings of DAS '20, the 15th International Conference on Development and Application Systems*, 146-150, IEEE. doi:10.1109/DAS49615.2020.9108915

- C39. Irina Popovici, **Radu-Daniel Vatavu**. (2019). Understanding Users' Preferences for Augmented Reality Television. *Proceedings of ISMAR '19, the 18th International Symposium on Mixed and Augmented Reality*, 397-406, IEEE. doi:10.1109/ISMAR.2019.00024 AR: 36/163=22.1% | **ARC A***
- C40. Petruța-Paraschiva Rusu, Maria-Doina Schipor, **Radu-Daniel Vatavu**. (2019). A Lead-In Study on Well-Being, Visual Functioning, and Desires for Augmented Reality Assisted Vision for People with Visual Impairments. *Proceedings of EHB '19, the 7th IEEE International Conference on e-Health and Bioengineering*, 4 pages, IEEE. doi:10.1109/EHB47216.2019.8970074
- C41. Adrian Aiordăchioae, **Radu-Daniel Vatavu**, Dorin Mircea Popovici. (2019). A Design Space for Vehicular LifeLogging to Support Creation of Digital Content in Connected Cars. *Proceedings of EICS '19, the 11th the ACM SIGCHI Symposium on Engineering Interactive Computing Systems*. Article no. 9, 6 pages, ACM. doi:10.1145/3319499.3328234
- C42. Nathan Magrofuoco, Jean Vanderdonckt, Paolo Roselli, Jorge-Luis Perez-Medina, **Radu-Daniel Vatavu**. (2019). GestMan: A Cloud System for Managing Stroke Gesture Sets. *Proceedings of EICS '19, the 11th the ACM SIGCHI Symposium on Engineering Interactive Computing Systems*, 7:1-7:6, ACM. doi:10.1145/3319499.3328227



BEST TECH NOTE AWARD

- C43. **Radu-Daniel Vatavu**. (2019). The Dissimilarity-Consensus Approach to Agreement Analysis in Gesture Elicitation Studies. *Proceedings of CHI '19, the 37th ACM Conference on Human Factors in Computing Systems*, Article no. 224, 13 pages, ACM. doi:10.1145/3290605.3300454 AR: 703/2958=23.8% | **ARC A***
- C44. **Radu-Daniel Vatavu**, Ovidiu-Ciprian Ungurean. (2019). Stroke-Gesture Input for People with Motor Impairments: Empirical Results & Research Roadmap. *Proceedings of CHI '19, the 37th ACM Conference on Human Factors in Computing Systems*, Article no. 215, 14 pages, ACM. doi:10.1145/3290605.3300445 AR: 703/2958=23.8% | **ARC A***
- C45. **Radu-Daniel Vatavu**, Lisa Anthony, Jacob O. Wobbrock. (2018). \$Q: A Super-Quick, Articulation-Invariant Stroke-Gesture Recognizer for Low-Resource Devices. *Proceedings of MobileHCI '18, the 20th International Conference on Human-Computer Interaction with Mobile Devices and Services*, Article no. 23, 12 pages, ACM. doi:10.1145/3229434.3229465 AR: 50/216=23.1% | **ARC B**



HONORABLE MENTION AWARD

- C46. Luis A. Leiva, Daniel Martín-Albo, **Radu-Daniel Vatavu**. (2018). GATO: predicting human performance with multistroke and multitouch gesture input. *Proceedings of MobileHCI '18, the 20th International Conference on Human-Computer Interaction with Mobile Devices and Services*, Article no. 32, 11 pages, ACM. doi:10.1145/3229434.3229478 AR: 50/216=23.1% | **ARC B**
- C47. Irina Popovici, **Radu-Daniel Vatavu**. (2018). Perceived Usability, Desirability, and Workload of Mid-Air Gesture Control for Smart TVs. *Proceedings of RoCHI '18, the 15th Romanian International Conference on Human-Computer Interaction*, 91-98. dblp.org/rec/conf/rochi/PopoviciV18 AR: 28/42=66.7%
- C48. Bogdan-Florin Gheran, Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu**. (2018). Toward Smart Rings as Assistive Devices for People with Motor Impairments: A Position Paper. *Proceedings of RoCHI '18, the 15th Romanian Int. Conference on Human-Computer Interaction*, 99-106. dblp.org/rec/conf/rochi/GheranUV18 AR: 28/42=66.7%
- C49. Bogdan-Florin Gheran, Jean Vanderdonckt, **Radu-Daniel Vatavu**. (2018). Gestures for Smart Rings: Empirical Results, Insights, and Design Implications. *Proceedings of DIS '18, the 2018 Designing Interactive Systems Conference*, 623-635, ACM. doi:10.1145/3196709.3196741 AR: 107/487=22.0% | **ARC B**
- C50. Luis A. Leiva, Daniel Martín-Albo, Réjean Plamondon, **Radu-Daniel Vatavu**. (2018). KeyTime: Super-Accurate Prediction of Stroke Gesture Production Times. *Proc. of CHI '18, the 36th ACM Conference on Human Factors in Computing Systems*, Article 239, 12 pages. doi:10.1145/3173574.3173813 AR: 666/2592=25.7% | **ARC A***
- C51. Luis A. Leiva, Daniel Martín-Albo, **Radu-Daniel Vatavu**. (2017). Synthesizing Stroke Gestures Across User Populations: A Case for Users with Visual Impairments. *Proc. of CHI '17, the 35th ACM Conference on Human Factors in Computing Systems*, 4182-4193, ACM. doi:10.1145/3025453.3025906 AR: 606/2424=25% | **ARC A***

- C52. **Radu-Daniel Vatavu**. (2017). Improving Gesture Recognition Accuracy on Touch Screens for Users with Low Vision. In *Proceedings of CHI '17, the 35th ACM Conference on Human Factors in Computing Systems*, 4182-4193, ACM. doi:10.1145/3025453.3025941 AR: 606/2424=25% | **ARC CORE A***
- C53. Maria Doina Schipor, **Radu-Daniel Vatavu**. (2017). Neurobiological and Neurocognitive Models of Vision for Touch Input on Mobile Devices. *Proceedings of EHB '17, the 6th IEEE International Conference on e-Health and Bioengineering*, 353-356, IEEE. doi:10.1109/EHB.2017.7995434
- C54. Maria Doina Schipor, **Radu-Daniel Vatavu**. (2017). Coping Strategies of People with Low Vision for Touch Input: A Lead-in Study. *Proceedings of EHB '17, the 6th IEEE International Conference on e-Health and Bioengineering*, 357-360, IEEE. doi:10.1109/EHB.2017.7995435
- C55. **Radu-Daniel Vatavu**, Annette Mossel, Christian Schönauer. (2016). Digital Vibrons: Understanding Users' Perceptions of Interacting with Invisible, Zero-Weight Matter. *Proceedings of MobileHCI '16, the 18th International Conference on Human-Computer Interaction with Mobile Devices and Services*, 217-226, ACM. doi:10.1145/2935334.2935364 AR: 57/238=23.9% | **ARC B**
- C56. **Radu-Daniel Vatavu**, Jacob O. Wobbrock. (2016). Between-Subjects Elicitation Studies: Formalization and Tool Support. *Proceedings of CHI '16, the 34th ACM Conference on Human Factors in Computing Systems*, 3390-3402, ACM. doi:10.1145/2858036.2858228 AR: 565/2435=23.2% | **ARC A***
- C57. Martez E. Mott, **Radu-Daniel Vatavu**, Shaun K. Kane, Jacob O. Wobbrock. (2016). Smart Touch: Improving Touch Accuracy for People with Motor Impairments with Template Matching. *Proceedings of CHI '16, the 34th ACM Conference on Human Factors in Computing Systems*, 1934-1946, ACM. doi:10.1145/2858036.2858390 AR: 565/2435=23% | **ARC A***



BEST PAPER AWARD

- C58. **Radu-Daniel Vatavu**, Lisa Anthony, Quincy Brown. (2015). Child or Adult? Inferring Smartphone Users' Age Group from Touch Measurements Alone. *Proc. of INTERACT'15, the 15th IFIP TC.13 International Conference on Human-Computer Interaction*, 1-9, Springer. doi:10.1007/978-3-319-22723-8_1 AR: 85/286=29.7% | **ARC A**
- C59. Christian Schönauer, Annette Mossel, Ionut-Alexandru Zaiti, **Radu-Daniel Vatavu**. (2015). Touch, Movement & Vibration: User Perception of Vibrotactile Feedback for Touch and Mid-Air Gestures. *Proceedings of INTERACT'15, the 15th IFIP TC.13 International Conference on Human-Computer Interaction*, 165-172, Springer. doi:10.1007/978-3-319-22723-8_14 AR: 85/286=29.7% | **ARC A**
- C60. **Radu-Daniel Vatavu**. (2015). Audience Silhouettes: Peripheral Awareness of Synchronous Audience Kinesics for Social Television. *Proceedings of TVX'15, the 2nd ACM Int. Conf. on Interactive Experiences for TV and Online Video*, 13-22, ACM. doi:10.1145/2745197.2745207 AR: 12/50=24.0%




BEST PAPER AWARD

- C61. **Radu-Daniel Vatavu**, Jacob O. Wobbrock. (2015). Formalizing Agreement Analysis for Elicitation Studies: New Measures, Significance Test, and Toolkit. *Proceedings of CHI'15, the 33rd ACM SIGCHI Conference on Human Factors in Computing Systems*, 1325-1334, ACM. doi:10.1145/2702123.2702223 AR: 495/2150=23.0% | **ARC A***



HONORABLE MENTION AWARD

- C62. **Radu-Daniel Vatavu**, Lisa Anthony, Jacob O. Wobbrock. (2014). Gesture Heatmaps: Understanding Gesture Performance with Colorful Visualizations. *Proceedings of ICMI'14, the 16th ACM International Conference on Multimodal Interaction*, 172-179, ACM. doi:10.1145/2663204.2663256 AR: 49/127=38.6% | **ARC B**
- C63. Yosra Rekik, **Radu-Daniel Vatavu**, Laurent Grisoni. (2014). Understanding Users' Perceived Difficulty of Multi-Touch Gesture Articulation. *Proceedings of ICMI'14, the 16th ACM International Conference on Multimodal Interaction*, 232-239, ACM. doi:10.1145/2663204.2663273 AR: 49/127=38.6% | **ARC B**
- C64. **Radu-Daniel Vatavu**, Matei Mancaş. (2014). Visual Attention Measures for Multi-Screen TV. *Proceedings of TVX'14, the ACM International Conference on Interactive Experiences for TV and Online Video*, 111-118, ACM. doi:10.1145/2602299.2602305 AR: 20/80=25.0%

- C65. **Radu-Daniel Vatavu**, Ionut-Alexandru Zaiți. (2014). Leap Gestures for TV: Insights from an Elicitation Study. *Proceedings of TVX'14, the ACM International Conference on Interactive Experiences for TV and Online Video*, 131-138, ACM. doi:10.1145/2602299.2602316 AR: 20/80=25.0%
- C66. Yosra Rekik, **Radu-Daniel Vatavu**, Laurent Grisoni. (2014). Match-Up & Conquer: A Two-Step Technique for Recognizing Unconstrained Bimanual and Multi-Finger Touch Input. *Proceedings of AVI'14, the 12th International Working Conference on Advanced Visual Interfaces*, 201-208, ACM. doi:10.1145/2598153.2598167 AR: 47/164=28.7% | **ARC B**
- C67. **Radu-Daniel Vatavu**, Lisa Anthony, Jacob O. Wobbrock. (2013). Relative Accuracy Measures for Stroke Gestures. *Proceedings of ICMI'13, the 15th ACM International Conference on Multimodal Interaction*, 279-286, ACM. doi:10.1145/2522848.2522875 AR: 50/133=38% | **ARC B**
- C68. **Radu-Daniel Vatavu**, Matei Mancaș. (2013). Interactive TV Potpourris: An Overview of Designing Multi-screen TV Installations for Home Entertainment. *Proceedings of INTETAIN'13, 5th Int. ICST Conference on Intelligent Technologies for Interactive Entertainment*. LNICS 124, 49-54, Springer. doi:10.1007/978-3-319-03892-6_6
- C69. **Radu-Daniel Vatavu**. (2013). There's a World outside Your TV: Exploring Interactions beyond the Physical TV Screen. *Proceedings of EuroITV'13, the 11th European Conference on Interactive TV and Video*, 143-152, ACM. doi:10.1145/2465958.2465972 AR: 21/58=36%
- C70. Ionuț-Alexandru Zaiți, **Radu-Daniel Vatavu**, Ștefan-Gheorghe Pentiu. (2013). Exploring Hand Posture for Smart Mobile Devices. *Proc. of SouthCHI'13, the 1st International Conference on Human Factors in Computing and Informatics*. LNCS 7946, 721-731, Springer. doi:10.1007/978-3-642-39062-3_52 AR:57/169=34%
- C71. Lisa Anthony, **Radu-Daniel Vatavu**, Jacob O. Wobbrock. (2013). Understanding the Consistency of Users' Pen and Finger Stroke Gesture Articulation. *Proceedings of GI'13, the 39th Graphics Interface Conference*, 87-94, Canadian Information Processing Society. doi:2532129.2532145 AR: 16/42=38% (HCI TRACK) | **ARC B**
- C72. **Radu-Daniel Vatavu**, Géry Casiez, Laurent Grisoni. (2013). Small, Medium, or Large?: Estimating the User-Perceived Scale of Stroke Gestures. *Proceedings of CHI'13, the 31st ACM SIGCHI Conference on Human Factors in Computing Systems*, 277-280, ACM. doi:10.1145/2470654.2470692 AR: 392/1963=20.0% | **ARC A***
- C73. **Radu-Daniel Vatavu**, Cătălin Marian Chera, Wei-Tek Tsai. (2012). Gesture Profile for Web Services: An Event-driven Architecture to Support Gestural Interfaces for Smart Environments. *Proceedings of AmI'12, the International Joint Conference on Ambient Intelligence*. LNCS 7683, 161-176, Springer. doi:10.1007/978-3-642-34898-3_11 AR: 18/47=38% (LONG PAPERS)
- C74. **Radu-Daniel Vatavu**, Lisa Anthony, Jacob O. Wobbrock. (2012). Gestures as Point Clouds: A \$P Recognizer for User Interface Prototypes. *Proceedings of ICMI'12, the 14th ACM International Conference on Multimodal Interaction*, 273-280, ACM. doi:10.1145/2388676.2388732 AR: 15/74=20% (LONG PAPERS) | **ARC B**
-  **OUTSTANDING PAPER AWARD**
- C75. Cătălin Marian Chera, Wei-Tek Tsai, **Radu-Daniel Vatavu**. (2012). Gesture Ontology for Informing Service-Oriented Architectures. *Proceedings of ISIC'12, the IEEE International Symposium on Intelligent Control*. Washington, 1184-1189, IEEE. doi:10.1109/ISIC.2012.6398257 **ARC B**
- C76. **Radu-Daniel Vatavu**. (2012). User-Defined Gestures for Free-Hand TV Control. *Proceedings of EuroITV'2012, the 10th European Conference on Interactive TV and Video*, 45-48, ACM. doi:10.1145/2325616.2325626 AR:31/91=34.1%
- C77. **Radu-Daniel Vatavu**. (2012). Small Gestures Go a Long Way: How Many Bits per Gesture Do Recognizers Actually Need? *Proceedings of DIS'12, the 9th ACM International Conference on Designing Interactive Systems*, 328-337, ACM. doi:10.1145/2317956.2318006 AR: 90/449=20.0% | **ARC B**
- C78. **Radu-Daniel Vatavu**. (2012). 1F: One Accessory Feature Design for Gesture Recognizers. *Proceedings of IUI'12, the 17th International Conference on Intelligent User Interfaces*, 297-300, ACM. doi:10.1145/2166966.2167022 AR: 49/212=23.1% | **ARC A**


- C79. **Radu-Daniel Vatavu**. (2011). The Effect of Sampling Rate on the Performance of Template-based Gesture Recognizers. In *Proceedings of ICMI'11, the 13th International Conference on Multimodal Interaction*, 271-278, ACM. doi:10.1145/2070481.2070531 ACC. RATE: 47/120=39.2% | **ARC B**
- C80. **Radu-Daniel Vatavu**, Daniel Vogel, Géry Casiez, Laurent Grisoni. (2011). Estimating the Perceived Difficulty of Pen Gestures. *Proceedings of INTERACT'11, the 13th IFIP TC13 Conference on Human-Computer Interaction*. LNCS 6947, 89-106, Springer. doi:10.1007/978-3-642-23771-3_9 AR: 111/402=27.6% | **ARC A**
- C81. **Radu-Daniel Vatavu**. (2011). Reusable Gestures for Interacting with Ambient Displays in Unfamiliar Environments. *Proceedings of ISAmI'11, the 2nd International Symposium on Ambient Intelligence*. Advances in Intelligent and Soft Computing 92, 157-164, Springer. doi:10.1007/978-3-642-19937-0_20
- C82. **Radu-Daniel Vatavu**, Laurent Grisoni, Ștefan-Gheorghe Pentiu. (2010). Multiscale Detection of Gesture Patterns in Continuous Motion Trajectories. *Proceedings of GW'09, the 8th International Gesture Workshop*, LNCS 5934, 85-97, Springer. doi:10.1007/978-3-642-12553-9_8
- C83. **Radu-Daniel Vatavu**, Laurent Grisoni, Ștefan-Gheorghe Pentiu. (2009). Gesture Recognition Based on Elastic Deformation Energies. *Proceedings of GW'07, the 7th Int. Gesture Workshop*, LNCS 5085, 1-12, Springer. doi:10.1007/978-3-540-92865-2_1 AR: 31/53=58%
- C84. **Radu-Daniel Vatavu**, Ștefan-Gheorghe Pentiu. (2008). Interactive Coffee Tables: Interfacing TV within an Intuitive, Fun and Shared Experience. *Proceedings of EuroITV'08, the 6th European Interactive TV Conference*, LNCS 5066, 183-187, Springer. doi:10.1007/978-3-540-69478-6_24 AR: 42/156=27%
- C85. **Radu-Daniel Vatavu**, Ștefan-Gheorghe Pentiu, Christophe Chaillou, Laurent Grisoni, Samuel Degrande. (2006). Visual Recognition of Hand Postures for Interacting with Virtual Environments. *Proceedings of DAS '06, the 8th International Conference on Development and Application Systems*, 477-482. <https://aece.ro/abstractplus.php?year=2006&number=2&article=12>

SHORT PAPERS

Note: Short papers listed in this section were peer-reviewed as Work-in-Progress, Late-Breaking Work, and posters. Top-tier conferences, e.g., CHI, ISMAR, UIST, etc. represent very selective venues even for short papers. Venues ranked **A***, **A**, and **B** by the ARC CORE (Computing Research & Education) are also highlighted.

01. Jean Vanderdonckt, **Radu-Daniel Vatavu**, Arthur Sluÿters. (2024). Engineering Touchscreen Input for 3-Way Displays: Taxonomy, Datasets, and Classification. *Proc. EICS Companion '24, the 16th ACM SIGCHI Symposium on Engineering Interactive Computing Systems*, 57-65. ACM. doi:10.1145/3660515.3661331 AR: 9/25=36.0%
02. Laura-Bianca Bilius, **Radu-Daniel Vatavu**, Jean Vanderdonckt. (2024). Expanding V2X with V2DUIs: Distributed User Interfaces for Media Consumption in the Vehicle-to-Everything Era. *Proceedings of IMX '24, the ACM International Conference on Interactive Media Experiences*, 394-401. ACM. doi:10.1145/3639701.3663643
03. **Radu-Daniel Vatavu**, Laura-Bianca Bilius, Alexandru-Tudor Andrei, Mihail Terenti, Adrian-Vasile Catana, Alexandru-Ionut Slean. (2024). ChairMX: On-Chair Input for Interactive Media Consumption Experiences for Everyone, Everywhere. *Proceedings of IMX '24, the ACM International Conference on Interactive Media Experiences*, 447-451. ACM. doi:10.1145/3639701.3661090
04. Mihail Terenti, Matthieu Rupin, Baptiste Reynal, Laurent Grisoni, **Radu-Daniel Vatavu**. (2024). The Eclectic User Experience of Combined On-Screen and On-Wrist Vibrotactile Feedback in Touchscreen Input. *Proceedings of CHI '24 EA, the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, Article no. 315, 7 pages, ACM. doi:10.1145/3613905.3650835 AR: 391/1154=33.9% | **ARC A***
05. Mihail Terenti, Maria Casado-Palacios, Monica Gori, **Radu-Daniel Vatavu**. (2024). What Is the User Experience of Eyes-Free Touch Input with Vibrotactile Feedback Decoupled from the Touchscreen? *Proceedings of CHI '24 EA, the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, Article no. 372, 8 pages, ACM. doi:10.1145/3613905.3650804 AR: 391/1154=33.9% | **ARC A***
06. Jean Vanderdonckt, **Radu-Daniel Vatavu**, Julie Manon, Michael Saint-Guillain, Philippe Lefevre, Jessica J. Marquez. (2024). Might as Well Be on Mars: Insights on the Extraterrestrial Applicability of Interaction Design

Frameworks from Earth. *Proceedings of CHI '24 EA, the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, Article no. 239, 8 pages. ACM. doi:10.1145/3613905.3650807 AR: 391/1154=33.9% | **ARCA***

07. Adrian Aiordăchioae, **Radu-Daniel Vatavu**. (2024). Lifelogging in Mixed Reality. *Proceedings of CHI '24 EA, the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, Article no. 226, 8 pages, ACM. doi:10.1145/3613905.3650897 AR: 391/1154=33.9% | **ARCA***
08. Laura-Bianca Bilius, Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu**. (2023). An Expressivity-Complexity Tradeoff?: User-Defined Gestures from the Wheelchair Space are Mostly Deictic. *Proceedings of CHI '23 EA, the CHI Conference on Human Factors in Computing Systems Extended Abstracts*, Article No. 35, 8 pages, ACM. doi:10.1145/3544549.3585695 AR: 327/967=33.8% | **ARCA***
09. Bogdan-Florin Gheran, **Radu-Daniel Vatavu**, Jean Vanderdonckt. (2023). New Insights into User-Defined Smart Ring Gestures with Implications for Gesture Elicitation Studies. *Proceedings of CHI '23 EA, the CHI Conference on Human Factors in Computing Systems Extended Abstracts*, Article No. 216, 8 pages, ACM. doi:10.1145/3544549.3585590 AR: 327/967=33.8% | **ARCA***
10. Laura-Bianca Bilius, **Radu-Daniel Vatavu**. (2023). 'I Could Wear It All of the Time, Just Like My Wedding Ring:' Insights into Older People's Perceptions of Smart Rings. *Proceedings of CHI '23 EA, the CHI Conference on Human Factors in Computing Systems Extended Abstracts*, Article no. 165, 8 pages, ACM. doi:10.1145/3544549.3585771 AR: 327/967=33.8% | **ARCA***
11. Alexandru-Ionuț Șiean, Cristian Pamparău, **Radu-Daniel Vatavu**. (2022). Scenario-based Exploration of Integrating Radar Sensing into Everyday Objects for Free-Hand Television Control. *Proc. of IMX '22, the ACM International Conference on Interactive Media Experiences*, 357-362, ACM. doi:10.1145/3505284.3532982
12. Santiago Villarreal-Narvaez, Alexandru-Ionuț Șiean, Arthur Sluÿters, **Radu-Daniel Vatavu**, Jean Vanderdonckt. (2022). Informing Future Gesture Elicitation Studies for Interactive Applications that Use Radar Sensing. *Proceedings of AVI '22, the International Conference on Advanced Visual Interfaces*, Article no. 50, 3 pages, ACM. doi:10.1145/3531073.3534475 **ARCA B**
13. Alexandru-Tudor Andrei, Alexandru-Ionuț Șiean, **Radu-Daniel Vatavu**. (2022). Tap4Light: Smart Lighting Interactions by Tapping with a Five-Finger Augmentation Device. *Proceedings of AH '22, the 13th Augmented Human International Conference*, Article no. 4, 2 pages, ACM. doi:10.1145/3532525.3532535
14. **Radu-Daniel Vatavu**. (2022). Are Ambient Intelligence and Augmented Reality Two Sides of the Same Coin? Implications for Human-Computer Interaction. *Proceedings of CHI '22 EA, the CHI Conference on Human Factors in Computing Systems Extended Abstracts*, Article no. 362, 8 pages, ACM. doi:10.1145/3491101.3519710 AR: 258/722=35.7% | **ARCA***
15. Mihail Terenti, **Radu-Daniel Vatavu**. (2022). Measuring the User Experience of Vibrotactile Feedback on the Finger, Wrist, and Forearm for Touch Input on Large Displays. *Proceedings of CHI '22 EA, the CHI Conference on Human Factors in Computing Systems Extended Abstracts*, Article no. 286, 7 pages, ACM. doi:10.1145/3491101.3519704 AR: 258/722=35.7% | **ARCA***
16.  Ovidiu-Andrei Schipor, Laura-Bianca Bilius, Ovidiu-Ciprian Ungurean, Alexandru-Ionuț Șiean, Alexandru-Tudor Andrei, **Radu-Daniel Vatavu**. (2022). Personalized Wearable Interactions with WearSkill. *Proceedings of W4A '22, the 19th Web for All Conference*, Article no. 8, 2 pages, ACM. doi:10.1145/3493612.3520474

ACCESSIBILITY CHALLENGE JUDGES' AWARD

ACCESSIBILITY CHALLENGE DELEGATES' AWARD

17. David Geerts, **Radu-Daniel Vatavu**, Alisa Burova, Vinoba Vinayagamoorthy, Martez Mott, Michael Crabb, Kathrin Gerling. (2021). Challenges in Designing Inclusive Immersive Technologies. *Proc. of MUM '21, the 20th Int. Conference on Mobile and Ubiquitous Multimedia*, 182-185, ACM. doi:10.1145/3490632.3497751 **ARCA B**
18. Cristian Pamparău, **Radu-Daniel Vatavu**, Andrei R. Costea, Răzvan Jurchiș, Adrian Opre. (2021). XR4ISL: Enabling Psychology Experiments in Extended Reality for Studying the Phenomenon of Implicit Social Learning.

- Proceedings of MUM '21, the 20th International Conference on Mobile and Ubiquitous Multimedia*, 195-197, ACM. doi:10.1145/3490632.3497830 **ARC B**
19. Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**. (2021). Software Architecture Based on Web Standards for Gesture Input with Smartwatches and Smartglasses. *Proceedings of MUM '21, the 20th International Conference on Mobile and Ubiquitous Multimedia*, 186-188, ACM. doi:10.1145/3490632.3497780 **ARC B**
 20. Mihail Terenti, **Radu-Daniel Vatavu**. (2021). How Do HCI Researchers Describe Their Software Tools? Insights from a Synopsis Survey of Tools for Multimodal Interaction. *Companion Publication of the 2021 International Conference on Multimodal Interaction*, 7-12, ACM. doi:10.1145/3461615.3485431 AR: 7/25=28.0% | **ARC B**
 21. Laura-Bianca Bilius, **Radu-Daniel Vatavu**. (2021). Demonstration of GestuRING, a Web Tool for Ring Gesture Input. *Adjunct Publication of UIST '21, the 34th Annual ACM Symposium on User Interface Software and Technology*, 124-125, ACM. doi:10.1145/3474349.3480199 **ARC A***
 22. **Radu-Daniel Vatavu**. (2021). Accessibility of Interactive Television and Media Experiences: Users with Disabilities Have Been Little Voiced at IMX and TVX. *Proceedings of IMX '21, the ACM International Conference on Interactive Media Experiences*, 218-222, ACM. doi:10.1145/3452918.3465485
 23. Alexandru-Ionuț Șiean, **Radu-Daniel Vatavu**, Jean Vanderdonckt. (2021). Taking That Perfect Aerial Photo: A Synopsis of Interactions for Drone-Based Aerial Photography and Video. *Proceedings of IMX '21, the ACM International Conference on Interactive Media Experiences*, 275-279, ACM. doi:10.1145/3452918.3465484
 24. Cristian Pamparău, **Radu-Daniel Vatavu**. (2020). A Research Agenda Is Needed for Designing for the User Experience of Augmented and Mixed Reality: A Position Paper. *Proceedings of MUM '20, the 19th International Conference on Mobile and Ubiquitous Multimedia*, 323-325, ACM. doi:10.1145/3428361.3432088
 25. Cristian Pamparău, Adrian Aiordachioae, **Radu-Daniel Vatavu**. (2020). From Do You See What I See? to Do You Control What I See? Mediated Vision, From a Distance, for Eyewear Users. *Proc. of MUM '20, the 19th Int. Conference on Mobile and Ubiquitous Multimedia*, 326-328, ACM. doi:10.1145/3428361.3432089
 26. Adrian Aiordăchioae, David Gherasim, Alexandru-Ilie Maciuc, Bogdan-Florin Gheran, **Radu-Daniel Vatavu**. (2020). Addressing Inattentive Blindness with Smart Eyewear and Vibrotactile Feedback on the Finger, Wrist, and Forearm. *Proceedings of MUM '20, the 19th International Conference on Mobile and Ubiquitous Multimedia*, 329-331, ACM. doi:10.1145/3428361.3432080
 27. **Radu-Daniel Vatavu**, Jean Vanderdonckt. (2020). What Gestures Do Users with Visual Impairments Prefer to Interact with Smart Devices? And How Much We Know About It. *Proceedings of DIS '20 Companion, the Companion Publication of the 2020 ACM Conference on Designing Interactive Systems*, 85-90, ACM. doi:10.1145/3393914.3395896 AR: 50/199=25.1% | **ARC B**
 28. Bogdan-Florin Gheran, **Radu-Daniel Vatavu**. (2020). From Controls on the Steering Wheel to Controls on the Finger: Using Smart Rings for In-Vehicle Interactions. *Proceedings of DIS '20 Companion, the Companion Publication of the 2020 ACM Conference on Designing Interactive Systems*, 299-304, ACM. doi:10.1145/3393914.3395851 AR: 50/199=25.1% | **ARC B**
 29. Laura-Bianca Bilius, **Radu-Daniel Vatavu**. (2020). A Synopsis of Input Modalities for In-Vehicle Infotainment and Consumption of Interactive Media. *Proceedings of IMX '20, the ACM International Conference on Interactive Media Experiences*, 195-199, ACM. doi:10.1145/3391614.3399400
 30. Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**, Wenjun Wu. (2019). Integrating Peripheral Interaction into Augmented Reality Applications. *Proceedings of ISMAR '19 Adjunct, the 18th International Symposium on Mixed and Augmented Reality*, 341-342, IEEE. doi:10.1109/ISMAR-Adjunct.2019.00-12 **ARC A***
 31. Irina Popovici, **Radu-Daniel Vatavu**. (2019). Consolidating the Research Agenda of Augmented Reality Television with Insights from Potential End-Users. *Proceedings of ISMAR '19 Adjunct, the 18th International Symposium on Mixed and Augmented Reality*, 73-74, IEEE. doi:10.1109/ISMAR-Adjunct.2019.00033 **ARC A***
 32. Irina Popovici, **Radu-Daniel Vatavu**. (2019). Towards Visual Augmentation of the Television Watching Experience: Manifesto and Agenda. *Proceedings of TVX '19, the 2019 ACM International Conference on Interactive Experiences for TV and Online Video*, 199-204, ACM. doi:10.1145/3317697.3325121

33. Irina Popovici, **Radu-Daniel Vatavu**, Wenjun Wu. (2019). TV Channels in Your Pocket! Linking Smart Pockets to Smart TVs. *Proceedings of TVX '19, the 2019 ACM International Conference on Interactive Experiences for TV and Online Video*, 193-198, ACM. doi:10.1145/3317697.3325119
34. Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu**, Luis A. Leiva, Daniel Martín-Albo. (2018). Predicting stroke gesture input performance for users with motor impairments. *Proceedings of MobileHCI '18 Adjunct, the 20th International Conference on Human-Computer Interaction with Mobile Devices and Services*, 23-30, ACM. doi:10.1145/3236112.3236116 **ARC B**
35. Bogdan-Florin Gheran, **Radu-Daniel Vatavu**, Jean Vanderdonckt. (2018). Ring x2: Designing Gestures for Smart Rings using Temporal Calculus. *DIS '18 Companion, the 2018 ACM Conference Companion Publication on Designing Interactive Systems*, 117-122, ACM. doi:10.1145/3197391.3205422 AR: 50/107=46.7% | **ARC B**
36. Jean-Yves Lionel Lawson, Jean Vanderdonckt, **Radu-Daniel Vatavu**. (2018). Mass-Computer Interaction for Thousands of Users and Beyond. *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems*, Paper LBW032, ACM. doi:10.1145/3170427.3188465 AR: 255/641=39.8% | **ARC A***
37. Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu**, Luis A. Leiva, Réjean Plamondon. (2018). Gesture Input for Users with Motor Impairments on Touchscreens: Empirical Results based on the Kinematic Theory. *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems*, Paper LBW537, 6 pages, ACM. doi:10.1145/3170427.3188619 AR: 255/641=39.8% | **ARC A***
38. Petru-Vasile Cioată, **Radu-Daniel Vatavu**. (2018). In Tandem: Exploring Interactive Opportunities for Dual Input and Output on Two Smartwatches. *Proceedings of IUI '18 Companion, the 23rd International Conference on Intelligent User Interfaces Companion*, Article no. 60, 2 pages, ACM. doi:10.1145/3180308.3180369 **ARC A**
39. Dorin-Mircea Popovici, **Radu-Daniel Vatavu**, Mihai Polceanu. (2015). GRASphere: A Prototype to Augment Indirect Touch with Grasping Gestures. *Proceedings of the 14th International Conference on Mobile and Ubiquitous Multimedia (MUM '15)*, 350-354, ACM. doi: 10.1145/2836041.2841206

CHAPTERS IN BOOKS

- B01. **Radu-Daniel Vatavu**. (2024). Gesture-based Interaction. In: C. Stephanidis, G. Salvendy (Eds.) *Interaction Techniques and Technologies in Human-Computer Interaction*, Chapter 6, 24 pages, CRC Press, Taylor & Francis. doi:10.1201/9781003490678-6
- B02. **Radu-Daniel Vatavu**. (2023). Gesture-based Interaction. In: J. Vanderdonckt, P. Palanque, M. Winckler (Eds.) *Handbook of Computer Interaction*, 47 pages, Springer. doi:10.1007/978-3-319-27648-9_20-1
- B03. Luis A. Leiva, Daniel Martín-Albo, **Radu-Daniel Vatavu**, Réjean Plamondon. (2020). Stroke Gesture Synthesis in Human-Computer Interaction. In: R. Plamondon, A. Marcelli, M.A. Ferrer (Eds.) *The Lognormality Principle and its Applications in e-Security, e-Learning and e-Health*, 211-235, Series in Machine Perception and Artificial Intelligence 88, World Scientific Publishing. doi:10.1142/9789811226830_0010
- B04. Yosra Rekik, **Radu-Daniel Vatavu**, Laurent. Grisoni. (2016). Spontaneous Gesture Production Patterns on Multi-touch Interactive Surfaces. In: C. Anslow, P. Campos, J. Jorge (Eds.) *Collaboration Meets Interactive Spaces*, 33-46, Springer. doi:10.1007/978-3-319-45853-3_3
- B05. **Radu-Daniel Vatavu**, Ovidiu-Ciprian Ungurean, Ștefan-Gheorghe Pentiu. (2011). Body Gestures for Office Desk Scenarios. In D. England (Ed.), *Whole Body Interaction*, 163-172, Springer Human-Computer Interaction Series. doi:10.1007/978-0-85729-433-3_13
- B06. **Radu-Daniel Vatavu**. (2011). The Understanding of Meaningful Events in Gesture-Based Interaction. In J. Zhang, L. Shao, L. Zhang, G.A. Jones (Eds.), *Intelligent Video Event Analysis and Understanding*, 1-19, Springer Studies in Computational Intelligence 332, Springer. doi:10.1007/978-3-642-17554-1_1
- B07. **Radu-Daniel Vatavu**. (2010). Creativity in Interactive TV: Personalize, Share, and Invent Interfaces. In A. Marcus, A. Cereijo Roibas, R. Sala (Eds.), *Mobile TV: Customizing Content and Experience*, 121-139, Springer Human-Computer Interaction Series. doi:10.1007/978-1-84882-701-1_12

- B08. **Radu-Daniel Vatavu.** (2009). Interfaces That Should Feel Right: Natural Interaction with Multimedia Information. In M. Grgic et al. (Eds.), *Recent Advances in Multimedia Signal Processing and Communications*, 145-170, Springer Studies in Computational Intelligence 231. doi:10.1007/978-3-642-02900-4_7

WORKSHOP COMMUNICATIONS

- W01. Klen Čopič Pucihar, Francesca Meneghello, Dariush Salami, Arthur Sluÿters, **Radu-Daniel Vatavu.** (2024). Beyond Radar Waves: The First Workshop on Radar-Based Human-Computer Interaction. In *Companion Proceedings of the 16th ACM SIGCHI Symposium on Engineering Interactive Computing Systems*. ACM, New York, NY, USA, 97-102. doi:10.1145/3660515.3662836
- W02. **Radu-Daniel Vatavu.** (2023). Vulnerabilities of Mediated Embodiment: Towards Unmasking Security and Privacy Risks of Ability-Mediating Wearables. In *Proceedings of the Workshop on Advances of Mobile and Wearable Biometrics* at ACM MobileHCI '23, CEUR-WS 3517, 65-69. <https://ceur-ws.org/Vol-3517/paper6.pdf>
- W03. Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu.** (2019). Towards Interactions with Augmented Reality Systems in Hyper-Connected Cars. In *Proceedings of HCI Engineering 2019, the 2nd Workshop on Charting the Way Towards Methods and Tools for Advanced Interactive Systems* at ACM EICS '19, CEUR-WS 2503, 76-82. http://ceur-ws.org/Vol-2503/paper1_12.pdf
- W04. **Radu-Daniel Vatavu,** Ionuț-Alexandru Zaiți. (2011). An Investigation of Extrinsic-Oriented Ambient Exploration for Gaming Applications. In R. Wichert, K. Van Laerhoven, J. Gelissen (Eds.), *Constructing Ambient Intelligence*, CCIS 277, 245-248, Springer. doi:10.1007/978-3-642-31479-7_42
- W05. **Radu-Daniel Vatavu.** (2010). Understanding Challenges in Designing Interactions for the Age of Ambient Media. In *Proceedings of SAME'10, the 3rd Workshop on Semantic Ambient Media Experience, in conjunction with AmI'2010*. International SERIES on Information Systems and Management in Creative eMedia, 8-13. <http://www.ambientmediaassociation.org/Journal/index.php/series/article/view/174>
- W06. **Radu-Daniel Vatavu.** (2009). Enhancing Human-Human Interactions through Emotional Responsive Ambient Media. *Proceedings of SAME'2009, the 2nd Workshop on Semantic Ambient Media Experience* at AmI' 09.
- W07. **Radu-Daniel Vatavu,** Ovidiu Ciprian Ungurean, Ștefan-Gheorghe Pentiuc. (2009). Gestures for your Workplace: Investigating Body Interaction for Everyday Desk Scenarios. *Proceedings of WBI'2009, the 3rd Workshop on Whole Body Interaction* at ACM CHI '09.
- W08. Ovidiu Ciprian Ungurean, Ștefan-Gheorghe Pentiuc, **Radu-Daniel Vatavu.** (2009). Use Your Head: An Interface for Computer Games using Head Gestures. *Proceedings of GW' 09, the 8th International Gesture Workshop*. <https://www.techfak.uni-bielefeld.de/ags/wbski/GW2009/page6/page6.html>
- W09. **Radu-Daniel Vatavu,** Ștefan-Gheorghe Pentiuc, Tudor Ioan Cerlină. (2007). Bringing Context into Play: Supporting Game Interaction through Real-Time Context Acquisition. *Proceedings of WMISI'07, the Workshop on Multimodal Interfaces in Semantic Interaction* at ACM ICMI '07, 3-8, ACM. doi:10.1145/1330572.1330573
- W10. **Radu-Daniel Vatavu,** Ștefan-Gheorghe Pentiuc. (2005). A Graphical User Interface with Real-Time Information Feedback for a Video Camera Controlled Arm Robot. *Proceedings of IWCIT'2005, the International Workshop of Control and Information Technologies*, 49-54.

KEYNOTES, COURSES, and TUTORIALS

01. **Radu-Daniel Vatavu.** (2024). Emerging Human-Computer Interaction Modalities in the Age of AI. Keynote at *HCI-E '24, the 3rd Eurasian Conference on Human-Computer Interaction* (Istanbul, Turkey). <https://hci-e.com>
02. **Radu-Daniel Vatavu.** (2024). The New Natural in Human-AI Natural Interaction. Keynote at the *Romanian AI Days 2024* (Bucharest, Romania). <https://days.airomania.eu>
03. **Radu-Daniel Vatavu.** (2024). Embracing Non-Natural Design in Human-Computer Interaction. Keynote at *AVI '24, the 17th International Conference on Advanced Visual Interfaces* (Arenzano, Genova, Italy). doi:10.1145/3656650.3660545 **ARC B**

04. **Radu-Daniel Vatavu.** (2024). Embracing Non-Natural Interaction Design. Keynote at the *GEMINI Workshop on Gaze, Gestures and Multimodal Interaction* (Lancaster, UK). <https://gemini-erc.eu/gemini2024workshop>
05. **Radu-Daniel Vatavu.** (2022). Designing Interactive Experiences in the Interplay between Ambient Intelligence and Mixed Reality. *Proceedings of CHI '22 Extended Abstracts, the CHI Conference on Human Factors in Computing Systems Extended Abstracts*, Article no. 140, 1-3, ACM. doi:10.1145/3491101.3503763 **ARCA***
06. **Radu-Daniel Vatavu.** (2022). Designing Interactive Computer Systems within the Framework of Sensorimotor Realities. Invited Paper at *ECCO '22, the 12th International Conference on Electronics, Communications, and Computing*. <http://repository.utm.md/handle/5014/21894>
07. **Radu-Daniel Vatavu.** (2021). Designing Interactive Experiences with Computer Systems that Understand Users' Body Movement and Gestures. Keynote at *ECCO'21, the 11st International Conference on Electronics, Communications, and Computing*, p. 20. <http://repository.utm.md/handle/5014/20169>
08. **Radu-Daniel Vatavu.** (2020). Digital Environments for Supporting and Amplifying Motor and Learning Skills. Keynote at the *2020 ATEE Winter Conference*. <https://atee2020.education>
09. Jean Vanderdonckt, **Radu-Daniel Vatavu.** (2018). Designing, Engineering, and Evaluating Gesture User Interfaces. Course at CHI '18. *Proceedings of CHI EA '18, the 2018 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, Article no. C22, 4 pages, ACM. doi:10.1145/3170427.3170648 **ARCA***
10. **Radu-Daniel Vatavu.** (2017). Fundamentals of Gesture Production, Recognition, and Analysis. Course at CHI '17. *Proceedings of CHI EA '17, the CHI Extended Abstracts on Human Factors in Computing Systems*, 1174-1177, ACM. doi:10.1145/3027063.3027106 **ARCA***
11. **Radu-Daniel Vatavu.** (2016). Tools for Designing and Evaluating Gesture Interfaces. Keynote at the *CUTE MasterClass of the University of Mons*
12. **Radu-Daniel Vatavu.** (2016). Tools for Designing for Home Entertainment: Gesture Interfaces, Augmented Reality, and Smart Spaces. Course at CHI '16. *Proceedings of CHI EA '16, the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, 1003-1006, ACM. doi:10.1145/2851581.2856676 **ARCA***
13. **Radu-Daniel Vatavu.** (2015). Gesture Interfaces, Ambient Intelligence, and Augmented Reality for the Interactive TV. Tutorial at TVX '15. *Proceedings of TVX '15, the ACM International Conference on Interactive Experiences for TV and Online Video*, 197-198, ACM doi:10.1145/2745197.2745698
14. **Radu-Daniel Vatavu.** (2014). Designing New Interactive TV Applications with Gestures, Ambient Intelligence, and Augmented Reality. Tutorial at TVX '14. *Adjunct Proceedings of TVX'14, the ACM International Conference on Interactive Experiences for TV and Online Video*
15. **Radu-Daniel Vatavu.** (2013). Designing Gestural Interfaces for the Interactive TV. Tutorial at EuroITV '13. *Proceedings of EuroITV'2013, the 11th European Conference on Interactive TV and Video*, 167-168, ACM. doi:10.1145/2465958.2465981
16. **Radu-Daniel Vatavu.** (2012). Designing Gestural Interfaces for Future Home Entertainment Environments. Tutorial at EuroITV '13. *Adjunct Proceedings of EuroITV'2012, the 10th European Conference on Interactive TV and Video*, 136-137, Fraunhofer Institute for Open Communication Systems, Berlin

THESES

- T01. **Radu-Daniel Vatavu.** (2014). *Designing Gesture Interaction by Understanding Users*. Habilitation Thesis, defended on December 13, 2014 at the Technical University of Cluj-Napoca, Romania
- T02. **Radu-Daniel Vatavu.** (2008). *Real-time Human Gesture Acquisition for Interacting with Virtual Environments*. PhD Thesis, co-directed between University Lille 1, France and University of Suceava, Romania, defended on March 18, 2008 at the University of Suceava. link: theses.fr

AWARDED RESEARCH PROJECTS

P₁₈. **Sensorimotor Realities** (Jan. 2021 – Dec. 2023, PI)

- Funded by UEFISCDI, Romania (PNIII P4, "Fundamental and frontier research, Exploratory research projects", PCE29/2021) with a budget of approx. 250,000€ to conceptualize, design, and implement Sensorimotor Realities, a new type of physical-virtual reality
- Funding rate 23.2% (244/1053). The project was **ranked 9th place** in the area of Computer Science, and received the **Excellent** post-implementation rating for the quality of scientific results
- <http://www.eed.usv.ro/mintviz/projects/SensorimotorRealities>

P₁₇. **Radar-based Sensing Algorithms, Techniques, and Applications for Novel Interactions with Computing Systems** (2021 – 2022, Co-PI with Jean Vanderdonckt, Université catholique de Louvain)

- Funded by UEFISCDI, Romania (PNIII P3, "European and International Cooperation") and Wallonie Bruxelles International, Belgium with a budget of approx. 10,000€ to explore applications of radar-based gesture input
- Funding rate 79.2% (19/24). The project was ranked **1st place** out of 24 submitted applications
- <http://www.eed.usv.ro/mintviz/projects/RadarSense>

P₁₆. **Increasing the Institutional Capacity of the Machine Intelligence and Information Visualization Research Laboratory for Excellent Science in Interactive Technologies** (Jan. 2021 – Dec. 2022, PI)

- Funded by UEFISCDI, Romania (PNIII P3, "Awarding participation in Horizon 2020", 12/2021) with a budget of approx. 16,000€ to consolidate and increase the research capacity of the MintViz lab
- Funding rate 77.4% (48/62)
- <http://www.eed.usv.ro/mintviz/projects/MintVizAwardingParticipationH2020>

P₁₅. **WearSkill: Motor-Streamlined Interactions with Smart Wearables** (Aug. 2022 – Aug. 2022, PI)

- Funded by UEFISCDI, Romania (PNIII P2, "Demonstrative Experimental Project", 276PED/2020) with a budget of approx. 125,000€ to develop new interactive technology for increasing the accessibility of smart wearables
- Funding rate 14.8% (316/2140). The project was ranked **3rd place** in the area of ICT, Space, and Security
- <http://www.eed.usv.ro/mintviz/projects/WearSkill>

P₁₄. **Transdiagnostic Mechanisms for Mental Disorders: A Mixed Reality System for the Assessment of Implicit Social Learning** (Aug. 2022 – Aug. 2022, Co-PI with Prof. Adrian Opre)

- Funded by UEFISCDI, Romania (PNIII P2, "Demonstrative Experimental Project", 347PED/2020) with a budget of approx. 125,000€ to develop a Mixed Reality experimental model for exploring Implicit Social Learning
- Funding rate 14.8% (316/2140 submitted). The project was ranked 13rd place in the area of Health
- <http://www.eed.usv.ro/mintviz/projects/ISELMIR>

P₁₃. **Multimodal Haptic with Touch Devices** (March 2020 – Feb. 2024, Co-PI for University of Suceava)

- Project coordinated by Université de Lille, France with partners Université catholique de Louvain, IIT, Università Degli Studi di Genova, Go Touch VR, Verbund Katholischer Kliniken Dusseldorf, and Hap2U
- Funded in the H2020 programme under MSCA-ITN-2019 (Innovative Training Networks, GA 860114), with a budget of approx. 1,500,000€, of which approx. 210,000€ for the University of Suceava with the goal to provide high-level training in the field of multimodal haptics to a new generation of Early Stage Researchers
- Funding rate 7.7% (103/1346)
- <https://cordis.europa.eu/project/id/860114>; <https://multitouch-itn.eu/project>

P₁₂. **Sensory Augmentation for Low-Vision Conditions using Smart Wearables** (Oct.2018-Oct.2020, PI)

- Funded by UEFISCDI, Romania (PNIII P1, "Young Independent Research Teams", TE141/2018) with a budget of approx. 100,000€ to design smartglasses/HMD interactive technology for enhancing visual perception
- Funding rate 12.5% (142/1131). The project was ranked **7th place** in the area of Mathematics and Informatics, and received the **"A"** post-implementation rating for the quality of scientific results
- <http://www.eed.usv.ro/mintviz/projects/Senses++>

P₁₁. Efficient Communications based on Smart Devices for In-Car Augmented Reality Interactive Applications (May 2018 – Sep. 2021, Co-PI with Prof. Dorin Mircea Popovici)

- Funded by UEFISCDI, Romania (PNIII P1, "Complex Consortium Projects", 21PCCDI/2018) with a budget of approx. 225,000€ to design interactive technology for in-vehicle AR. The project was part of the multi-project "Hybrid Light Visible Communication Platform and Augmented Reality for the Development of Intelligent Systems for Active Assistance and Safety of Vehicles" with PI Prof. Mihai Dimian, University of Suceava
- Funding rate 22.9% (87/380)
- <http://www.eed.usv.ro/mintviz/projects/CarSafe>

P₁₀. New Interaction Techniques for Smart Environments at the Periphery of User Attention (July 2018 – Dec. 2019, Co-PI with Wenjun Wu, Beihang University, Beijing)

- Funded by UEFISCDI, Romania (PNIII P3, "European and International Cooperation", 3BM/2018) and the Ministry of Science and Technology, China with a budget of approx. 8,200€ to cover scientific mobilities between the partners with the goal to design peripheral interaction techniques for smart environments
- Funding rate 33.7% (29/86). The project was ranked **3rd place** out of 86 applications
- <http://www.eed.usv.ro/mintviz/projects/PeriphInt>

P₉. MotorSkill: Effective Gesture Interactions with Touch Surfaces for Motor Impairment Conditions (Aug. 2017 – Dec. 2018, PI)

- Funded by UEFISCDI, Romania (PNIII P2, "Demonstrative Experimental Project", 209PED/2017) with a budget of approx. 103,000€ to design touch gesture input techniques for users with motor impairments
- Funding rate 12.1% (252/2074). The project was ranked 36th place in the area of ICT, Space, and Security, and received the "**A**" post-implementation rating for the quality of scientific results
- <http://www.eed.usv.ro/mintviz/projects/MotorSkill>

P₈. Computational Psychology of Human Movement to Understand Gestures and Body Kinesics (Jan. 2017 – Dec. 2018, Co-PI with Jean Vanderdonck, Université catholique de Louvain)

- Funded by UEFISCDI, Romania (PNIII P3, "European and International Cooperation", 101BM/2017) and Wallonie Bruxelles International, Belgium with a total budget of approx. 9,500€ to cover scientific mobilities between the partners to develop new methodology and a software tool for whole-body gesture analysis
- Funding rate 55.1% (16/29). The project was ranked 7th place out of 29 applications
- <http://www.eed.usv.ro/mintviz/projects/PSYKINESICS>

P₇. Interaction Techniques with Massive Data Clouds in Smart Environments (Oct. 2016 – Dec. 2017, Co-PI with Wenjun Wu, Beihang University)

- Funded by UEFISCDI, Romania (PNIII P3, "European and International Cooperation", 47BM/2016) and the Ministry of Science and Technology, China with a budget of approx. 8,200€ to cover scientific mobilities between partners to develop interaction techniques and data visualizations for smart environments
- Funding rate 30.4% (28/92). The project was ranked 5th place out of 29 applications
- <http://www.eed.usv.ro/mintviz/projects/InteractCloud>

P₆. Gesture Interfaces for Visually-Impairing Interaction Contexts (Oct. 2015 – Sep. 2017, PI)

- Funded by UEFISCDI, Romania (PNII "Young Independent Research Teams", 47/2015) with a budget of approx. 120,000€ to design efficient gesture input for contexts of use involving visual impairments
- Funding rate 13.1% (386/2961). The project was ranked **10th place** in the area of Mathematics and Informatics, and received the "**A+**" post-implementation rating for the quality of scientific results
- <http://www.eed.usv.ro/mintviz/projects/GIVISIMP>

P₅. Multimodal Feedback for Supporting Gesture Interaction in Smart Environments (Jan. 2014 - Dec. 2015, Co-PI with Hannes Kaufmann, Technical University of Vienna)

- Funded by UEFISCDI, Romania & OeAD, Austria (PNII "European and International Cooperation", contract no. 740/2014) with a budget of approx. 7,000€ to design and implement feedback modalities during gesture input
- Funding rate 51.2% (21/41). The project was ranked 4th place out of 21 applications
- <http://www.eed.usv.ro/mintviz/projects/LifeStage>

P₄. Gesture-based Interactive System for the Development and Educational Support of Children: Applications in Education, Tourism, and Discovery of Patrimony (Sep. 2012 – Sep. 2014, Co-PI with Matei Mancaş, University of Mons)

- Funded by UEFISCDI, Romania & Wallonie Bruxelles International, Belgium (PNI “European and International Cooperation”, contract no. 588/2012) with a budget of approx. 5,000€ for scientific mobilities
- <http://www.eed.usv.ro/mintviz/projects/InteractEDU>

P₃. Context-dependent gesture interaction (July 2010 – Feb. 2013, PI)

- I was awarded a post-doctoral scholarship within the project “Progress and development through post-doctoral research and innovation in engineering and applied sciences” (POSDRU/89/1.5/S/57083) of approx. 30,000€ to develop high-performing gesture recognition algorithms for various contexts of use

P₂. Wallonie-Bruxelles International post-doctoral scholarship

- I was awarded a WBI post-doctoral scholarship (ref. no. 2009/05914) that I declined for personal reasons

P₁. AUF International PhD scholarships (Sep. 2015 – Dec. 2017)

- I was awarded three doctoral scholarships from Agence Universitaire de la Francophonie (AUF), Sep. 2005 - Aug. 2006, Sep. 2006 - Aug. 2007, and Sep. - Dec. 2007, to fund my Ph.D. research on gesture interaction in VR

Other roles:

- Member of the **Advisory Team for the EPSRC New Investigator Award** (EP/X012395/1), “Content Accessibility: Highly Individualised Digital Content for Supporting Diverse Needs”, PI Dr. Timothy Neate (King’s College London), Sep. 2023 – Sep. 2025. <https://tdjneate.github.io/CA11y/index.html>
- Member of the **Management Committee of IC1307**, “European Network on Integrating Vision and Language (iV&L Net): Combining Computer Vision and Language Processing For Advanced Search, Retrieval, Annotation and Description of Visual Data”, 2014 – 2018. <https://www.cost.eu/actions/IC1307>

SCIENTIFIC AWARDS & DISTINCTIONS

A₂₄. 1st Place Blue Sky Paper Award, ICMI 2024

At the ACM International Conference on Multimodal Interaction – ICMI ’24 (San Jose, Costa Rica) for the paper “AI as Modality in Human Augmentation: Toward New Forms of Multimodal Interaction with AI-Embodied Modalities” [doi:10.1145/3678957.3678958](https://doi.org/10.1145/3678957.3678958)

A₂₃. The 2022 Best Paper Award, IEEE Pervasive Computing, awarded in 2023

For the paper “‘I Gave up Wearing Rings:’ Insights on the Perceptions and Preferences of Wheelchair Users for Interactions with Wearables” [doi:10.1109/MPRV.2022.3155952](https://doi.org/10.1109/MPRV.2022.3155952)

A₂₂. 1st Place Blue Sky Paper Award, ICMI 2023

At the ACM International Conference on Multimodal Interaction – ICMI ’23 (Paris, France) for the paper “From Natural to Non-Natural Interaction: Embracing Interaction Design Beyond the Accepted Convention of Natural” [doi:10.1145/3577190.3616122](https://doi.org/10.1145/3577190.3616122)

A₂₁. Honorable Mention Award, IMX 2023

At the ACM International Conference on Interactive Media Experiences – IMX ’23 (Nantes, France) for the paper “Accessibility Research in Digital Audiovisual Media: What Has Been Achieved and What Should Be Done Next?” [doi:10.1145/3573381.3596159](https://doi.org/10.1145/3573381.3596159)

A₂₀. Honorable Mention Award, CHI 2023

At the ACM CHI Conference on Human Factors in Computing Systems – CHI ’23 (Hamburg, Germany) for the paper “iFAD Gestures: Understanding Users’ Gesture Input Performance with Index-Finger Augmentation Devices” [doi:10.1145/3544548.3580928](https://doi.org/10.1145/3544548.3580928)

A₁₉. Honorable Mention Award, CHI 2023

At the ACM CHI Conference on Human Factors in Computing systems – CHI '23 (Hamburg, Germany) for the paper "Understanding Wheelchair Users' Preferences for On-Body, In-Air, and On-Wheelchair Gestures" co-authored with Laura-Bianca Bilius and Ovidiu-Ciprian Ungurean. [doi:10.1145/3544548.3580929](https://doi.org/10.1145/3544548.3580929)

A₁₈. Ten-Year Technical Impact Award, ICMI 2022

At the 24th ACM International Conference on Multimodal Interaction – ICMI '22 (Bengaluru, India) for the paper "Gestures as Point Clouds: A \$P Recognizer for User Interface Prototypes" co-authored with Lisa Anthony and Jacob O. Wobbrock. [doi:10.1145/2388676.2388732](https://doi.org/10.1145/2388676.2388732)

A₁₇. Accessibility Challenge Judges' Award, W4A 2022

At the 19th Web for All Conference – W4A '22 (Lyon, France/virtual event) for the paper "Personalized Wearable Interactions with WearSkill" co-authored with Ovidiu-Andrei Schipor, Laura-Bianca Bilius, Ovidiu-Ciprian Ungurean, Alexandru-Ionuț Șian, and Alexandru-Tudor Andrei. [doi:10.1145/3493612.3520474](https://doi.org/10.1145/3493612.3520474)

A₁₆. Accessibility Challenge Delegates' Award, W4A 2022

At the 19th Web for All Conference – W4A '22 (Lyon, France/virtual event, April 2022) for the paper "Personalized Wearable Interactions with WearSkill" co-authored with Ovidiu-Andrei Schipor, Laura-Bianca Bilius, Ovidiu-Ciprian Ungurean, Alexandru-Ionuț Șian, and Alexandru-Tudor Andrei. [doi:10.1145/3493612.3520474](https://doi.org/10.1145/3493612.3520474)

A₁₅. Best Application Paper Award, ISAmI 2021

At the International Symposium on Ambient Intelligence – ISAmI '21 (Salamanca, Spain) for the paper "Users with Motor Impairments' Preferences for Smart Wearables to Access and Interact with Ambient Intelligence Applications and Services" co-authored with Ovidiu-Ciprian Ungurean. [doi:10.1007/978-3-031-06894-2_2](https://doi.org/10.1007/978-3-031-06894-2_2)

A₁₄. Best Paper Award, IMX 2021

At the ACM International Conference on Interactive Media – IMX '21 (Virtual Event) for the paper "AR-TV and AR-Diànshi: Cultural Differences in Users' Preferences for Augmented Reality Television" co-authored with Irina Popovici, Pu Feng, and Wenjun Wu. [doi:10.1145/3452918.3458801](https://doi.org/10.1145/3452918.3458801)

A₁₃. Honorable Mention Award, IMX 2020

At the ACM International Conference on Interactive Media – IMX '20 (Virtual Event) for the paper "Conceptualizing Augmented Reality Television for the Living Room" co-authored with Pejman Saeghe, Teresa Chambel, Vinoba Vinayagamoorthy, and Marian Florin Ursu. [doi:10.1145/3391614.3393660](https://doi.org/10.1145/3391614.3393660)

A₁₂. "Mihai Drăganescu" Award of the Romanian Academy, 2019

For the paper "Smart-Pockets: Body-Deictic Gestures for Fast Access to Personal Data during Ambient Interactions". [doi:10.1016/j.ijhcs.2017.01.005](https://doi.org/10.1016/j.ijhcs.2017.01.005). The Romanian Academy represents Romania's highest, most prestigious cultural and scientific forum.

A₁₁. Honorable Mention Award, EICS 2019

At the 11th ACM SIGCHI Symposium on Engineering Interactive Computing Systems – EICS '19 (Valencia, Spain) for the paper "AB4Web: An On-Line A/B Tester for Comparing User Interface Design Alternatives" co-authored with Jean Vanderdonckt and Mathieu Zen. [doi:10.1145/3331160](https://doi.org/10.1145/3331160)

A₁₀. Best Tech Note Award, EICS 2019

At the 11th ACM SIGCHI Symposium on Engineering Interactive Computing Systems – EICS '19 (Valencia, Spain) for the paper "*GestMan: A Cloud System for Managing Stroke Gesture Sets*" co-authored with Nathan Magrofuoco, Jean Vanderdonckt, Paolo Roselli, and Jorge-Luis Perez-Medina. [doi:10.1145/3319499.3328227](https://doi.org/10.1145/3319499.3328227)

A₉. Honorable Mention Award, MobileHCI 2018

At the 20th ACM Int. Conf. on Human-Computer Interaction with Mobile Devices and Services - MobileHCI'18 (Barcelona, Spain) for the paper "\$Q: A Super-Quick, Articulation-Invariant Stroke-Gesture Recognizer for Low-Resource Devices" co-authored with Lisa Anthony and Jacob O. Wobbrock. [doi:10.1145/3229434.3229465](https://doi.org/10.1145/3229434.3229465)

A₈. Best Paper Award, CHI 2016

At the 34th ACM SIGCHI Conference on Human Factors in Computing Systems – CHI'16 (San Jose, CA, USA) for the paper "Smart Touch: Improving Touch Accuracy for People with Motor Impairments with Template Matching" co-authored with Martez E. Mott, Shaun K. Kane, Jacob O. Wobbrock. [doi:10.1145/2858036.2858390](https://doi.org/10.1145/2858036.2858390)

A7. Best Paper Award, TVX 2015

At the ACM International Conference on Interactive Experiences for TV and Online Video – TVX '15 (Brussels, Belgium) for the paper "Audience Silhouettes: Peripheral Awareness of Synchronous Audience Kinesics for Social Television". [doi:10.1145/2745197.2745207](https://doi.org/10.1145/2745197.2745207)

A6. "Best of CHI" Honorable Mention Award, CHI 2015

At the 33rd ACM SIGCHI Conference on Human Factors in Computing Systems – CHI'15 (Seoul, South Korea) for the paper "Formalizing Agreement Analysis for Elicitation Studies: New Measures, Significance Test, and Toolkit" co-authored with Jacob O. Wobbrock. [doi:10.1145/2702123.2702223](https://doi.org/10.1145/2702123.2702223)

A5. "Young Researcher of the Year" Award, 2013

Awarded by the Ștefan cel Mare University of Suceava for scientific merits

A4. Outstanding Paper Award, ICMI 2012

At the ACM International Conference on Multimodal Interaction - ICMI'12 (Santa Monica, CA, USA) for the paper "Gestures as Point Clouds: A 3D Recognizer for User Interface Prototypes" co-authored with Lisa Anthony and Jacob O. Wobbrock. [doi:10.1145/2388676.2388732](https://doi.org/10.1145/2388676.2388732)

A3. "Professor Bologna" Award, 2010

Awarded by the National Association of Students, Romania for teaching merits

A2. "Cum Laude" distinction for the Ph.D. defense, 2008

A1. Miscellaneous awards

During 1995 and 2004, I was the recipient of several awards and prizes at National and International competitions in Mathematics and Computer Science, including the Romanian National Olympiad in Informatics

PHD SUPERVISION

- **Alexandra Guriță Mihai**, Oct. 2024 – ongoing
- **Adrian-Vasile Catană**, Oct. 2021 – ongoing
- **Alexandru Tudor Andrei**, Oct. 2021 – ongoing
- **Mihail Terenti**, Oct. 2021 – September 2024, "Designing and Engineering Multimodal Feedback to Augment the User Experience of Touch Input", Marie Skłodowska-Curie fellowship and **Summa Cum Laude** distinction
- **Cristian Pamparău**, Oct. 2020 – July 2024, "Extended Reality for Enhancing Sensory and Cognitive Abilities", **Summa Cum Laude** distinction
- **Alexandru-Ionuț Șiean**, Oct. 2019 – May 2024, "Integrating Human-Drone Interaction into Smart Environments", **Magna Cum Laude** distinction
- **Adrian Aiordăchioae**, Oct. 2018 – Nov. 2023, "Lifelogging Techniques and Systems using Smartglasses with Built-in Video Cameras", **Summa Cum Laude** distinction
- **Irina Popovici**, Oct. 2016 - May 2023, "Specifying Interactive Experiences for Augmented Reality Television", **Summa Cum Laude** distinction
- **Bogdan-Florin Gheran**, Oct. 2015 – Sep. 2019, "Gesture Interfaces for Mobile and Wearable Devices", **Magna Cum Laude** distinction

INVOLVEMENT IN THE COMMUNITY

MAJOR ROLES (alphabetical order)

Associate Chair for CHI, the ACM Conference on Human Factors in Computing Systems: 2025, 2024, 2023, 2022, 2021, 2020, 2019, 2018

Associate Chair for EICS, the ACM SIGCHI Symp. on Engineering Interactive Computing Systems: 2025, 2024, 2023

Full Papers Co-Chair for EICS 2019, the 11th ACM SIGCHI Symposium on Engineering Interactive Computing Systems

Area Chair for ICEC 2018, the 17th International Conference on Entertainment Computing

Associate Chair for ISMAR, the IEEE Int. Symposium on Mixed and Augmented Reality: 2024, 2023, 2022, 2021

Associate Chair for IMX, the ACM Int. Conference on Interactive Media Experiences: 2024, 2020, 2018, 2016, 2014

Associate Chair for Mobile HCI, the ACM International Conference on Human-Computer Interaction with Mobile Devices and Services: 2024, 2023, 2022, 2021, 2019, 2018

Area Chair for RCIS 2019, the 13th IEEE International Conference on Research Challenges in Information Science

Full Papers Co-Chair for TVX 2019, the ACM Int. Conference on Interactive Experiences for TV and Online Video

Associate Chair for VRST, the ACM Symposium on Virtual Reality Software and Technology: 2024, 2023

Associate Chair for UIST, the Annual ACM Symposium on User Interface Software and Technology: 2022, 2020, 2016

EDITORIAL BOARD and STEERING COMMITTEE POSITIONS

Since 2023, Editorial Board of Taylor & Francis' International Journal of Human-Computer Interaction

2019 – 2021, Steering Committee of EICS, the ACM Symposium on Engineering Interactive Computing Systems

Since 2017, Editorial Board of Springer's Human-Computer Interaction series

Since 2014, Editorial Board of the EAI Endorsed Transactions on Creative Technologies

MEMBER OF THE PROGRAM COMMITTEE (reviewing only, alphabetical order)

AltMM, the ACM International Workshop on Multimedia Alternate Realities: 2016, 2017, 2018

AIVR, the 1st IEEE International Conference on Artificial Intelligence and Virtual Reality: 2018

EICS, the ACM SIGCHI Symposium on Engineering Interactive Computing Systems: 2017

INTETAIN, the International Conference on Intelligent Technologies for Interactive Entertainment: 2013 – 2016

ISAmI, the International Symposium on Ambient Intelligence: 2012 – 2024

ISEA, the International Symposium on Electronic Art: 2015, 2022 – 2023

IUI, the ACM International Conference on Intelligent User Interfaces: 2018 – 2019

SAME, the Workshop on Semantic Ambient Media Experience: 2012

VSMM, the International Conference on Virtual Systems and Multimedia: 2009

WBI, the Workshop on Whole Body Interaction in Games and Entertainment: 2011

PEER REVIEWING - JOURNALS (alphabetical order)

ACM Transactions on Interactive Intelligent Systems (ACM): 2013, 2015, 2017

ACM Transactions on Computing for Healthcare (ACM): 2020

ACM Transactions on Computer-Human Interaction (ACM): 2020-2023

ACM Computing Surveys (ACM): 2024

Automation in Construction, Elsevier: 2020

Behavior & Information Technology (Taylor & Francis): 2013, 2017, 2018

Engineering Applications of Artificial Intelligence (Elsevier): 2015

Frontiers in Psychology: 2021

Future Generation Computer Systems (Elsevier): 2017

IEEE Access (IEEE Computer Society): 2017

IEEE Computer Graphics and Applications (IEEE Computer Society): 2019

IEEE Consumer Electronics Magazine (IEEE Computer Society): 2017
IEEE Pervasive Computing (IEEE Computer Society): 2016
IEEE Transactions on Human-Machine Systems (IEEE Computer Society): 2015-2017
IEEE Transactions on Visualization and Computer Graphics (IEEE Computer Society): 2024
Interacting with Computers (Oxford Journals): 2016
International Journal of Human-Computer Studies (Elsevier): 2014-2024
International Journal of Human-Computer Interaction (Taylor & Francis): 2017-2020, 2022-2025
International Journal of Child-Computer Interaction (Elsevier): 2019
International Journal of Vehicular Technology (Hindawi): 2016
Journal of Ambient Intelligence & Humanized Computing (Springer): 2020
Journal of Motor Behavior (Taylor & Francis): 2018
Multimedia Tools and Applications (Springer): 2020-2022
Pervasive and Mobile Computing (Springer): 2014
Universal Access in the Information Society (Springer): 2021
Virtual Reality (Springer): 2021, 2023

PEER REVIEWING - CONFERENCES (alphabetical order)

3DUI, the IEEE Symposium on 3D User Interfaces: 2009, 2010
AMCIS, the Americas Conference on Information Systems: 2019
CHI, the Annual SIGCHI Conference on Human Factors in Computing Systems: 2009-2017, 2018-2025 (AC)
CSCW, the ACM Conference on Computer Supported Cooperative Work and Social Computing: 2014
DIS, the ACM Designing Interactive Systems Conference: 2010, 2012, 2014, 2019, 2023
EICS, the ACM SIGCHI Symposium on Engineering Interactive Computing Systems / Proceedings of the ACM on Human-Computer Interaction: 2010-2018, 2019 (Full Papers Co-Chair), 2020-2022, 2023-2025 (AC)
GI, the Graphics Interface Conference: 2007, 2013, 2014
HRI, the ACM/IEEE International Conference on Human-Robot Interaction: 2012, 2013, 2017
ICMI, the ACM International Conference on Multimodal Interfaces: 2008, 2009, 2011-2017
IMX, the ACM International Conference on Interactive Media Experiences: 2020, 2024 (AC)
INTERACT, the IFIP TC13 Conference on Human-Computer Interaction: 2009, 2011, 2013, 2015, 2017
INTETAIN, the Int. Conference on Intelligent Technologies for Interactive Entertainment: 2013, 2014, 2015, 2016
ISAmI, the International Symposium on Ambient Intelligence: 2012-2017, 2019, 2022
ISEA, the International Symposium on Electronic Art: 2015, 2022-2023
ISMAR, the International Symposium on Mixed and Augmented Reality: 2021 (AC), 2022 (AC), 2023 (AC), 2024 (AC)
ISWC, the Annual IEEE International Symposium on Wearable Computers: 2009
ISS, the ACM International Conference on Interactive Surfaces and Spaces: 2020
ITS, the ACM Interactive Tabletops and Surfaces Conference: 2013, 2014
IUI, the ACM International Conference on Intelligent User Interfaces: 2010, 2012, 2013, 2015, 2017-2019, 2022
MobileHCI, the ACM Int. Conference on Human-Computer Interaction with Mobile Devices and Services: 2008-2010, 2012-2016, 2018-2019 (AC), 2021-2024 (AC)
MOCO, the International Workshop on Movement and Computing: 2014, 2015
MUM, the International Conference on Mobile and Ubiquitous Multimedia: 2013
RCIS, the 13th IEEE International Conference on Research Challenges in Information Science: 2019
RoCHI, the Romanian Conference on Computer-Human Interaction: 2016
SUI, the ACM Symposium on Spatial User Interaction: 2013, 2017, 2024
TEI, the ACM International Conference on Tangible, Embedded and Embodied Interaction: 2012, 2013, 2017, 2022
TVX 2014, the ACM International Conference on Interactive Experiences for TV and Online Video: 2014 (AC), 2015, 2016 (AC), 2018 (AC), 2019 (Full Papers Co-Chair), 2020 (AC)

UbiComp / IWMUT, the ACM International Joint Conference on Pervasive and Ubiquitous Computing / Proc. of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies: 2018, 2022
UIST, the ACM Symposium on User Interface Software and Technology: 2012-2014, 2016 (AC), 2017, 2020 (AC), 2021, 2022 (AC), 2024
VR, the IEEE Virtual Reality Conference: 2010
VRST, the ACM Symposium on Virtual Reality Software and Technology: 2019, 2023 (AC)
VSMM, the International Conference on Virtual Systems and Multimedia: 2009

OTHER (alphabetical order)

Agence Nationale de la Recherche (ANR), France - Appel à projets générique: 2018
Committee of the National Olympiad in Informatics, Romania: 2019
Committee of the National Olympiad for Scientific Creativity, Romania: 2022-2024
Fonds de la Recherche Scientifique (FRS – FNRS), Belgium – FRIA Bourse: 2018
Fonds National de la Recherche (FNR), Luxembourg – CORE programme: 2021, 2023
H2020/Horizon-FETOPEN: 2020-2022, 2024
National Research, Development, and Innovation Office, Hungary - International cooperation: 2021
Research Grants Council (RCG) of Hong Kong – Early Career Scheme: 2022-2024
SIGCHI Outstanding Dissertation Award: 2025