

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

13 Universității

720229 Suceava

Romania



radu.vatavu@usm.ro



<http://www.eed.usv.ro/~vatavu>



<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

EDUCATION

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

Thesis: *Designing Gesture Interaction by Understanding Users*

Defended (on December 2014) at the Technical University of Cluj-Napoca, Romania

Scientific committee: Prof. Sergiu Nedevschi, Prof. Lucian Vințan, and Prof. Valentin Cristea

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

Co-directed thesis between University Lille 1, France and University of Suceava, Romania

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

Advisors: Prof. Christophe Chaillou and Prof. Ștefan-Gheorghe Pentiu



AWARDED "CUM LAUDE" DISTINCTION

Engineer Diploma in Computer Science, 1999 – 2004

Faculty of Electrical Engineering and Computer Science

University Ștefan cel Mare of Suceava, Romania



RANKED 1ST IN GRADUATING CLASS

Diploma in Economics, 1999 – 2003

Faculty of Economic Sciences and Administration

University Ștefan cel Mare of Suceava, Romania

ACADEMIC PROFESSIONAL EXPERIENCE

Professor of Computer Science, since February 2016

- Faculty of Electrical Engineering and Computer Science, University of Suceava, Romania
- Teaching Algorithms Design, Advanced Programming Concepts, Ambient Intelligence, Augmented Reality, Natural Human-Computer Interaction
- Research in Human-Computer Interaction, Ambient Intelligence, Accessible Computing, Augmented and Mixed Reality, Interactive Media, Entertainment Computing

Director of the Machine Intelligence and Information Visualization Lab since 2015

- Research goal: 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, University of Suceava, Romania
- Teaching Algorithms Design, Advanced Programming Concepts, Pattern Recognition, Advanced Artificial Intelligence, Image Processing Systems
- Research in Human-Computer Interaction, Ambient Intelligence, Entertainment Computing

Lecturer in Computer Science, 2009 - 2014

- Faculty of Electrical Engineering and Computer Science, 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

Assistant Professor in Computer Science, 2008 – 2009

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

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

- University Lille 1, France & University Ștefan cel Mare of Suceava, Romania
- Thesis: *Real-time Human Gesture Acquisition for Interacting with Virtual Environments*
- Advisors: Prof. Christophe Chaillou (Lille) and Prof. Ștefan-Gheorghe Pentiu (Suceava)
- Scholarship awarded by Agence Universitaire de la Francophonie (AUF) between 2015 – 2017

Invited/Visiting positions

Université catholique de Louvain, Belgium (one week in August 2022, November 2019, September 2018, and June 2017); **Beihang University**, Beijing, China (one week in October 2019 and August 2017); **Technical University of Moldova**, Republic of Moldova (one week in May 2017); **Technical University of Vienna**, Austria (one week in September 2015 and April 2014); **University of Mons**, Belgium (one week in October 2013, July 2013, April 2013, and October 2012); **INRIA Lille Nord Europe**, France (two months, June – July 2011), **University Lille 1, France** (one month, May 2011).



PUBLICATIONS

ARTICLES IN JOURNALS

Note: Journal metrics (5-Year IF) are provided from the Web of Science™ (WoS) InCites™ Journal Citation Reports® (JCR). My total impact factor for WoS journal articles is **96.579** (the absolute sum of the journals' 5-Year IFs) and, respectively, **46.165** (the absolute sum of the journals' 5-Year IFs divided by the number of my co-authors). I have published 31 articles in journals ranked in the Q1 and Q2 quartiles.

- J01. Alexandru-Ionuț Șean, Cristian Pamparău, Arthur Sluÿters, **Radu-Daniel Vatavu**, Jean Vanderdonckt. (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*. Springer, 15 pages. doi:10.1007/s12652-023-04606-9
Q2 quartile, IF: 3.662, 5-Year IF: 3.718 (JCR 2021)
- J02. Arthur Sluÿters, Sébastien Lambot, Jean Vanderdonckt, **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*. ACM, 45 pages. doi:10.1145/3589645
IF: 1.887, 5-Year IF: 5.466 (JCR 2021)
- J03. Cristian Pamparău, Ovidiu-Andrei Schipor, Alexandru Dancu, **Radu-Daniel Vatavu**. (2023). SAPIENS in XR: Operationalizing Interaction-Attention in Extended Reality. *Virtual Reality*. Springer, 17 pages. doi:10.1007/s10055-023-00776-1
Q1 quartile, IF: 4.697, 5-Year IF: 5.471 (JCR 2021)
- J04. 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 quartile, IF: 4.757, 5-Year IF: 4.253 (JCR 2021)
- J05. Mihail Terenti, **Radu-Daniel Vatavu**. (2022). VIREO: Web-based Graphical Authoring of Vibrotactile Feedback for Interactions with Mobile and Wearable Devices. *International Journal of Human-Computer Interaction*. Taylor & Francis. doi:10.1080/10447318.2022.2109584
Q1 quartile, IF: 4.920, 5-Year IF: 4.503 (JCR 2021)
- J06. Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**. (2022). GearWheels: A Software Tool to Support User Experiments on Gesture Input with Wearable Devices. *International Journal of Human-Computer Interaction*. Taylor & Francis. doi:10.1080/10447318.2022.2098907
Q1 quartile, IF: 4.920, 5-Year IF: 4.503 (JCR 2021)
- J07. 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: 1.603, 5-Year IF: 4.916 (JCR 2021)
- J08. 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.romjst.ro/contents-88
IF: 0.852, 5-Year IF: 0.581 (JCR 2021)
- J09. **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 quartile**, IF: 4.106, 5-Year IF: 4.075 (JCR 2021)
- J10. **Radu-Daniel Vatavu**, Petruta-Paraschiva Rusu, Ovidiu-Andrei Schipor, Maria-Doina Schipor. (2021). Preferences of people with visual impairments for augmented and mediated vision: A vignette experiment. *Multimedia Tools and Applications*. Springer. doi:10.1007/s11042-021-11498-4
Q2 quartile, IF: 2.577, 5-Year IF: 2.396 (JCR 2021)
- J11. Adrian Aiordăchioae, Cristian Pamparău, **Radu-Daniel Vatavu**. (2021). Lifelogging meets alternate and cross-realities: an investigation into broadcasting personal visual realities to remote audiences. *Multimedia Tools and Applications*. Springer. doi:10.1007/s11042-021-11310-3
Q2 quartile, IF: 2.577, 5-Year IF: 2.396 (JCR 2021)
- J12. Arthur Sluytters, Jean Vanderdonckt, **Radu-Daniel Vatavu**. (2021). Engineering Slidable Graphical User Interfaces with Slime. *Proceedings of the ACM on Human-Computer Interaction* 5 (EICS). ACM, New York, NY, USA. Article no. 200, 29 pages. doi:10.1145/3457147
- J13. 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 quartile, IF: 4.920, 5-Year IF: 4.503 (JCR 2021)
- J14. 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 quartile, IF: 2.577, 5-Year IF: 2.396 (JCR 2021)
- J15. 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)
- J16. 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 quartile, IF: 3.839, 5-Year IF: 4.318 (JCR 2021)
- J17. 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). ACM, New York, NY, USA Article no. 167, 26 pages. doi:10.1145/3432700
- J18. 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 quartile, IF: 3.632, 5-Year IF: 3.848 (JCR 2020)
- J19. **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), S29-S39. Romanian Academy. doi:www.romjist.ro/contents-80
IF: 0.643, 5-Year IF: 0.590 (JCR 2020)

- J20. 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. Elsevier, 95-107. doi:10.1016/j.ijhcs.2019.03.012
Q1 quartile, IF: 3.163, 5-Year IF: 3.383 (JCR 2019)
- J21. 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. *Proc. ACM on Human-Computer Interaction* 3 (EICS), 1:1-1:9. doi:10.1145/3300960
- J22. 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. doi:10.1145/3331153
- J23. 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. doi:10.1145/3331157
- J24.  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. doi:10.1145.3331160
HONORABLE MENTION AWARD at ACM EICS '19
- J25. Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**, Jean Vanderdonckt. (2019). Euphoria: A Scalable, Event-driven Architecture for Designing Interactions across Heterogeneous Devices in Smart Environments. *Information and Software Technology* 109. Elsevier, 43-59. doi:10.1016/j.infsof.2019.01.006
Q2 quartile, IF: 2.726, 5-Year IF: 3.130 (JCR 2019)
- J26. 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). IEEE, 76-85. doi:10.1109/MPRV.2018.2873856
Q1 quartile, IF: 3.813, 5-Year IF: 4.123 (JCR 2018)
- J27. **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). IEEE, 27-37. doi:10.1109/MPRV.2018.011591059
Q1 quartile, IF: 3.813, 5-Year IF: 4.123 (JCR 2018)
- J28. **Radu-Daniel Vatavu**. (2017). Characterizing Gesture Knowledge Transfer across Multiple Contexts of Use. *Journal on Multimodal User Interfaces* 11 (4). Springer International Publishing, 301-314. doi:10.1007/s12193-017-0247-x
 IF: 1.140, 5-Year IF: 0.872 (JCR 2017)
- J29.  **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. Elsevier, 1-21. doi:10.1016/j.ijhcs.2017.01.005
Q1 quartile, 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
- J30. **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)

- J31. **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). Taylor & Francis, 486-509. doi:10.1080/10447318.2017.1279827
IF: 1.259, 5-Year IF: 1.579 (JCR 2017)
- J32. 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). Science China Press & Springer, 072104:1–15. doi: 10.1007/s11432-015-1014-7
Q2 quartile, IF: 2.188, 5-Year IF: 1.329 (JCR 2017)
- J33. 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)
- J34. **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). Springer London, 781-801. doi:10.1007/s00779-015-0862-z
Q2 quartile, IF: 1.498, 5-Year IF: 1.708 (JCR 2015)
- J35. 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). Springer London, 821-838. doi:10.1007/s00779-015-0863-y
Q2 quartile, IF: 1.498, 5-Year IF: 1.708 (JCR 2015)
- J36. **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. Elsevier, 54-76. doi:10.1016/j.ijhcs.2014.10.007
Q1 quartile, IF: 1.476, 5-Year IF: 2.097 (JCR 2015)
- J37. **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). Elsevier, 590-607. doi:10.1016/j.ijhcs.2013.01.002
Q1 quartile, IF: 1.165, 5-Year IF: 1.942 (JCR 2013)
- J38. **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). Elsevier, 387-409. doi:10.1016/j.ijhcs.2012.11.005
Q1 quartile, IF: 1.165, 5-Year IF: 1.942 (JCR 2013)
- J39. 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). IOS Press, 187-211. doi:10.3233/AIS-130200
Q2 quartile, IF: 1.082, 5-Year IF: 1.252 (JCR 2013)
- J40. 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). Springer, 7-32. doi:10.1007/s11042-012-1228-4
Q2 quartile, IF: 1.058, 5-Year IF: 1.039 (JCR 2013)
- J41. **Radu-Daniel Vatavu**. (2013). On Designing Interactivity Awareness for Ambient Displays. *Multimedia Tools and Applications*, 66 (1). Springer, 59-80. doi:10.1007/s11042-012-1140-y



- Q2 quartile**, IF: 1.058, 5-Year IF: 1.039 (JCR 2013)
- J42. **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). IOS Press, 79-93. doi:10.3233/AIS-2012-0137
- Q2 quartile**, IF: 1.298, 5-Year IF: 1.640 (JCR 2012)
- J43. **Radu-Daniel Vatavu**. (2012). Point & Click Mediated Interactions for Large Home Entertainment Displays. *Multimedia Tools and Applications* 59. Springer, 113-128. doi:10.1007/s11042-010-0698-5
- Q2 quartile**, IF: 1.014, 5-Year IF: 0.932 (JCR 2012)
- J44. 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). Springer, 399-425. doi:10.1007/s11042-011-0917-8
- Q2 quartile**, IF: 1.014, 5-Year IF: 0.932 (JCR 2012)
- J45. **Radu-Daniel Vatavu**. (2012). Presence Bubbles: Supporting and Enhancing Human-Human Interaction with Ambient Media. *Multimedia Tools and Applications* 58 (2). Springer, 371-383. doi:10.1007/s11042-010-0674-0 | **Q2 quartile**, IF: 1.014, 5-Year IF: 0.932 (JCR 2012)
- J46. 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). Suceava, 85-88. doi:10.4316/AECE.2012.03013
IF: 0.552, 5-Year IF: 0.479 (JCR 2012)
- J47. 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). Suceava, 61-64. doi:10.4316/AECE.2008.02011
IF: 0.509 (JCR 2009)
- J48. **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). Suceava, 67-71. doi:10.4316/AECE.2008.01012
IF: 0.509 (JCR 2009)
- J49. **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)
- J50. 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). Elsevier, 1772-1780. doi:10.1016/j.ijfatigue.2007.02.026
Q1 quartile, IF: 1.117, 5-Year IF: 1.501 (JCR 2007)
- J51. **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
- J52. **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: Venues listed in this section are peer-reviewed and archival. Top-tier venues, such as CHI, ISMAR, UIST, MobileHCI, TVX/IMX, etc., are extremely selective with acceptance rates between 20% and 30%. (Where available, acceptance rates are also provided for each venue.) CHI is the premier conference of Human-Computer Interaction, the flagship conference of ACM SIGCHI,¹ and is ranked first in the "Top publications of Human-Computer Interaction" according to the h5-index.² Venues ranked **A***, **A**, and **B** by **ARC CORE** (Computing Research & Education) are highlighted.

- C01. 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*. ACM, New York, NY, USA, Article No. 518, 17 pages. doi:10.1145/3544548.3581022
ACC. RATE: 879/3182 = 27.6% | **ARC CORE A***
- C02.  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*. ACM, New York, NY, USA, Article No. 78, 16 pages. doi:10.1145/3544548.3580929
ACC. RATE: 879/3182 = 27.6% | **ARC CORE A***
HONORABLE MENTION AWARD
- C03.  **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*. ACM, New York, NY, USA, Article No. 576, 17 pages. doi:10.1145/3544548.3580928
ACC. RATE: 879/3182 = 27.6% | **ARC CORE A***
HONORABLE MENTION AWARD
- C04. **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*. IEEE, USA, 685-694. doi:10.1109/ISMAR55827.2022.00086
ACC. RATE: 93/441 = 21.1% | **ARC CORE A***
- C05. **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* (Bend, OR, USA). ACM, New York, NY, USA, Article No. 45, 17 pages. doi:10.1145/3526113.3545662
ACC. RATE: 98/372 = 26.3% | **ARC CORE A***
- C06. Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu**. (2022). Ability-Centered Examination of People with Motor Impairments' Interaction with Television Towards More Accessible Smart Home

¹ <http://www.sigchi.org/conferences>

² https://scholar.google.com/citations?view_op=top_venues&vq=eng_humancomputerinteraction

- Entertainment Environments. *Proceedings of ISAmI '22, the 13th International Symposium on Ambient Intelligence*. LNNS 603. Springer, Cham, 32-43. doi:10.1007/978-3-031-22356-3_4
- C07. Cristian Pamparau, **Radu-Daniel Vatavu**. (2022). The User Experience of Journeys in the Realm of Augmented Reality Television. In *Proceedings of IMX '22, the ACM International Conference on Interactive Media Experiences*. ACM, New York, NY, USA, 161-174. doi:10.1145/3505284.3529969
ACC. RATE: 19/47 = 40.4%
- C08. **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*. Universitat Oberta de Catalunya and ISEA International, 825-828. doi:10.7238/ISEA2022.Proceedings
ACC. RATE: 308/1100 = 28.0%
- C09. Bogdan-Florin Gheran, Santiago Villarreal-Narvaez, **Radu-Daniel Vatavu**, Jean Vanderdonckt. (2022). RepliGES and GEStory: Visual Tools for Systematizing and Consolidating Knowledge on User-Defined Gestures. In *Proceedings of AVI '22, the International Conference on Advanced Visual Interfaces*. ACM, New York, NY, USA, 5:1-5:9. doi:10.1145/3531073.3531112
ACC. RATE: 15/62 = 24.2% (LONG PAPERS) | **ARC CORE B**
- C10. Bogdan Popoveniuc, **Radu-Daniel Vatavu**. (2022). Transhumanism as a Philosophical and Cultural Framework for Extended Reality Applied to Human Augmentation. In *Proceedings of AH '22, the 13th Augmented Human International Conference*. ACM, New York, NY, USA, Article 6, 1-8. doi:10.1145/3532525.3532528
- C11. 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*. ACM, New York, NY, USA, Article no. 10, 1-5. doi:10.1145/3493612.3520455
- C12. **Radu-Daniel Vatavu**, Ovidiu-Ciprian Ungurean. (2022). Gesture Input Articulation with Upper-Body Wearables for Users with Upper-Body Motor Impairments. *Proceedings of CHI '22, the ACM Conference on Human Factors in Computing Systems*. ACM, New York, NY, USA, Article no. 2, 1-16. doi:10.1145/3491102.3501964
ACC. RATE: 637/2579 = 24.7% | **ARC CORE A***
- C13. **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 (Lecture Notes in Networks and Systems, vol. 483)*. Springer, Cham, 1-10. doi:10.1007/978-3-031-06894-2_1
- C14. 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.  *Proceedings of ISAmI '21, the 12th International Symposium on Ambient Intelligence (Lecture Notes in Networks and Systems, vol. 483)*. Springer, Cham, 11-21. doi:10.1007/978-3-031-06894-2_2
BEST APPLICATION PAPER AWARD
- C15. Alexandru-Ionuț Șiean, 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 (Lecture Notes in Networks and Systems, vol. 483)*. Springer, Cham, 22-33. doi:10.1007/978-3-031-06894-2_3
- C16. Alexandru-Ionuț Șiean, **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. ACM, New York, NY, USA, Article 7, 1-15. doi:10.1145/3441852.3471212

ACC. RATE: 36/124 = 29% | **ARC CORE A**

- C17. **Radu-Daniel Vatavu**, Laura-Bianca Bilius. (2021). GestuRING: A Web-based Tool for Designing Gesture Input with Rings, Ring-Like, and Ring-Ready Devices. *Proceedings of UIST '21, the 34th Annual ACM Symposium on User Interface Software and Technology*. ACM, New York, NY. doi:10.1145/3472749.3474780

ACC. RATE: 95/367 = 25.9% | **ARC CORE A***

- C18. 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, Cham. doi:10.1007/978-3-030-85616-8_11

ACC. RATE: 105/362 = 29% | **ARC CORE B**

- C19. 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, Cham. doi:10.1007/978-3-030-85616-8_10

ACC. RATE: 72/240 = 30% | **ARC CORE B**

- C20. Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu**. (2021). Coping, Hacking, and DIY: Reframing the Accessibility of Interactions with Television for People with Motor Impairments. In *Proceedings of IMX '21, the ACM International Conference on Interactive Media Experiences*. ACM, New York, NY, USA, 37-49. doi:10.1145/3452918.3458802

ACC. RATE: 17/40 = 42.5%

- C21. Irina Popovici, **Radu-Daniel Vatavu**, Pu Feng, Wenjun Wu. (2021). AR-TV and AR-Diànshì: Cultural Differences in Users' Preferences for Augmented Reality Television. In *Proceedings of IMX '21, the ACM International Conference on Interactive Media Experiences*. ACM, New York, NY, USA, 50-60. doi:10.1145/3452918.3458801 | ACC. RATE: 17/40 = 42.5%



BEST PAPER AWARD

- C22. 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. In *Companion of EICS '21, the 2021 ACM SIGCHI Symposium on Engineering Interactive Computing Systems*. ACM, New York, NY, USA, 26-31. doi:10.1145/3459926.3464762

ACC. RATE: 6/13 = 46.1%

- C23. **Radu-Daniel Vatavu**, Jean Vanderdonck. (2020). Design Space and Users' Preferences for Smartglasses Graphical Menus: A Vignette Study. In *Proceedings of MUM '20, the 19th International Conference on Mobile and Ubiquitous Multimedia*. ACM, New York, NY, USA, 1-12. doi:10.1145/3428361.3428467


ACC. RATE: 32/82 = 39.0% | **ARC CORE B**

- C24. Adrian Aiordăchioae, Daniel Furtună, **Radu-Daniel Vatavu**. (2020). Aggregating Life Tags for Opportunistic Crowdsensing with Mobile and Smartglasses Users. In *Proceedings of GoodTechs '20, the 6th EAI International Conference on Smart Objects and Technologies for Social Good*. ACM, New York, NY, USA, 66-71. doi:10.1145/3411170.3411237

- C25. Santiago Villarreal, Jean Vanderdonck, **Radu-Daniel Vatavu**, Jacob O. Wobbrock. (2020). A Systematic Review of Gesture Elicitation Studies: What Can We Learn from 216 Studies? In

Proceedings of DIS '20, the 15th ACM International Conference on Designing Interactive Systems. ACM, New York, NY, USA, 855-872. doi:10.1145/3357236.3395511

ACC. RATE: 139/578 = 24.0% | **ARC CORE B**


- C26.  **Radu-Daniel Vatavu**, Pejman Saeghe, Teresa Chambel, Vinoba Vinayagamoorthy, Marian F. Ursu. (2020). Conceptualizing Augmented Reality Television for the Living Room. In *Proceedings of IMX '20, the ACM International Conference on Interactive Media Experiences.* ACM, New York, NY, USA, 14 pages. doi:10.1145/3391614.3393660

ACC. RATE: 13/50 = 26.0%

HONORABLE MENTION AWARD

- C27. Jean Vanderdonckt, Iyad Khaddam, **Radu-Daniel Vatavu**. (2020). The Foldinterface Editor: A Visual Tool for Designing User Interfaces for Foldable Displays. In *Proceedings of EICS '20, the 12th ACM SIGCHI Symposium on Engineering Interactive Computing Systems.* ACM, New York, NY, USA, Article no. 1, 6 pages. doi:10.1145/3393672.3398490
- C28. Jean Vanderdonckt, **Radu-Daniel Vatavu**. (2020). A Pen User Interface for Controlling a Virtual Puppet. In *Proceedings of EICS '20, the 12th ACM SIGCHI Symposium on Engineering Interactive Computing Systems.* ACM, New York, NY, USA, Article no. 6, 6 pages. doi:10.1145/3393672.3398637
- C29. Adrian Aiordăchioae, Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**. (2020). An Inventory of Voice Input Commands for Users with Visual Impairments and Assistive Smartglasses Applications. In *Proceedings of DAS '20, the 15th International Conference on Development and Application Systems.* IEEE, 146-150. doi:10.1109/DAS49615.2020.9108915
- C30. Irina Popovici, **Radu-Daniel Vatavu**. (2019). Understanding Users' Preferences for Augmented Reality Television. In *Proceedings of ISMAR '19, the 18th International Symposium on Mixed and Augmented Reality.* IEEE, 397-406. doi:10.1109/ISMAR.2019.00024

ACC. RATE: 36/163 = 22.1% | **ARC CORE A***


- C31. 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. In *Proceedings of EHB '19, the 7th IEEE International Conference on e-Health and Bioengineering.* IEEE, 4 pages. doi:10.1109/EHB47216.2019.8970074
- C32. Adrian Aiordăchioae, **Radu-Daniel Vatavu**, Dorin Mircea Popovici. (2019). A Design Space for Vehicular LifeLogging to Support Creation of Digital Content in Connected Cars. In *Proceedings of EICS '19, the 11th the ACM SIGCHI Symposium on Engineering Interactive Computing Systems.* ACM, New York, NY, USA, Article no. 9, 6 pages. doi:10.1145/3319499.3328234
- C33.  Nathan Magrofuoco, Jean Vanderdonckt, Paolo Roselli, Jorge-Luis Perez-Medina, **Radu-Daniel Vatavu**. (2019). GestMan: A Cloud System for Managing Stroke Gesture Sets. In *Proceedings of EICS '19, the 11th the ACM SIGCHI Symposium on Engineering Interactive Computing Systems.* ACM, New York, NY, USA, Article no. 7, 6 pages. doi:10.1145/3319499.3328227

BEST TECH NOTE AWARD

- C34. **Radu-Daniel Vatavu**. (2019). The Dissimilarity-Consensus Approach to Agreement Analysis in Gesture Elicitation Studies. In *Proceedings of CHI '19, the 37th ACM Conference on Human Factors in Computing Systems.* ACM, New York, NY, USA, Paper no. 224, 13 pages. doi:10.1145/3290605.3300454
- ACC. RATE: 703/2958 = 23.8% | **ARC CORE A***
- C35. **Radu-Daniel Vatavu**, Ovidiu-Ciprian Ungurean. (2019). Stroke-Gesture Input for People with Motor Impairments: Empirical Results & Research Roadmap. In *Proceedings of CHI '19, the 37th ACM*

Conference on Human Factors in Computing Systems. ACM, New York, NY, USA, Paper no. 215, 14 pages. doi:10.1145/3290605.3300445

ACC. RATE: 703/2958 = 23.8% | **ARC CORE A***

- C36.  **Radu-Daniel Vatavu**, Lisa Anthony, Jacob O. Wobbrock. (2018). \$Q: A Super-Quick, Articulation-Invariant Stroke-Gesture Recognizer for Low-Resource Devices. In *Proceedings of MobileHCI '18, the 20th International Conference on Human-Computer Interaction with Mobile Devices and Services*. ACM, New York, NY, USA, Article no. 23, 12 pages. doi:10.1145/3229434.3229465

ACC. RATE: 50/216 = 23.1% | **ARC CORE B**

HONORABLE MENTION AWARD

- C37. Luis A. Leiva, Daniel Martín-Albo, **Radu-Daniel Vatavu**. (2018). GATO: predicting human performance with multistroke and multitouch gesture input. In *Proceedings of MobileHCI '18, the 20th International Conference on Human-Computer Interaction with Mobile Devices and Services*. ACM, New York, NY, USA, Article no. 32, 11 pages. doi:10.1145/3229434.3229478

ACC. RATE: 50/216 = 23.1% | **ARC CORE B**

- C38. Irina Popovici, **Radu-Daniel Vatavu**. (2018). Perceived Usability, Desirability, and Workload of Mid-Air Gesture Control for Smart TVs. In *Proceedings of RoCHI '18, the 15th Romanian International Conference on Human-Computer Interaction*. Matrix Rom, Bucharest, 91-98.

doi:dblp.org/rec/conf/rochi/PopoviciV18

ACC. RATE: 28/42 = 66.7%

- C39. Bogdan-Florin Gheran, Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu**. (2018). Toward Smart Rings as Assistive Devices for People with Motor Impairments: A Position Paper. In *Proceedings of RoCHI '18, the 15th Romanian International Conference on Human-Computer Interaction*. Matrix Rom, Bucharest, 99-106. doi:dblp.org/rec/conf/rochi/GheranUV18

ACC. RATE: 28/42 = 66.7%

- C40. Bogdan-Florin Gheran, Jean Vanderdonckt, **Radu-Daniel Vatavu**. (2018). Gestures for Smart Rings: Empirical Results, Insights, and Design Implications. In *Proceedings of DIS '18, the 2018 Designing Interactive Systems Conference*. ACM, New York, NY, USA, 623-635. doi:10.1145/3196709.3196741

ACC. RATE: 107/487 = 22.0% | **ARC CORE B**

- C41. Luis A. Leiva, Daniel Martín-Albo, Réjean Plamondon, **Radu-Daniel Vatavu**. (2018). KeyTime: Super-Accurate Prediction of Stroke Gesture Production Times. In *Proceedings of CHI '18, the 36th ACM Conference on Human Factors in Computing Systems*. ACM, New York, NY, USA, Paper no. 239, 12 pages. doi:10.1145/3173574.3173813

ACC. RATE: 666/2592 = 25.7% | **ARC CORE A***

- C42. Luis A. Leiva, Daniel Martín-Albo, **Radu-Daniel Vatavu**. (2017). Synthesizing Stroke Gestures Across User Populations: A Case for Users with Visual Impairments. In *Proceedings of CHI '17, the 35th ACM Conference on Human Factors in Computing Systems*. ACM, New York, NY, USA, 4182-4193.

doi:10.1145/3025453.3025906

ACC. RATE: 606/2424 = 25% | **ARC CORE A***

- C43. **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*. ACM, New York, NY, USA, 4182-4193. doi:10.1145/3025453.3025941

ACC. RATE: 606/2424 = 25% | **ARC CORE A***

- C44. Maria Doina Schipor, **Radu-Daniel Vatavu**. (2017). Neurobiological and Neurocognitive Models of Vision for Touch Input on Mobile Devices. In *Proceedings of EHB '17, the 6th IEEE International Conference on e-Health and Bioengineering*. IEEE, 353-356. doi:10.1109/EHB.2017.7995434
- C45. Maria Doina Schipor, **Radu-Daniel Vatavu**. (2017). Coping Strategies of People with Low Vision for Touch Input: A Lead-in Study. In *Proceedings of EHB '17, the 6th IEEE International Conference on e-Health and Bioengineering*. IEEE, 357-360. doi:10.1109/EHB.2017.7995435
- C46. **Radu-Daniel Vatavu**, Annette Mossel, Christian Schönauer. (2016). Digital Vibrons: Understanding Users' Perceptions of Interacting with Invisible, Zero-Weight Matter. In *Proceedings of MobileHCI '16, the 18th International Conference on Human-Computer Interaction with Mobile Devices and Services*. ACM, New York, NY, USA, 217-226. doi:10.1145/2935334.2935364
ACC. RATE: 57/238 = 23.9% | **ARC CORE B**
- C47. **Radu-Daniel Vatavu**, Jacob O. Wobbrock. (2016). Between-Subjects Elicitation Studies: Formalization and Tool Support. In *Proceedings of CHI '16, the 34th ACM Conference on Human Factors in Computing Systems*. ACM, New York, NY, USA, 3390-3402. doi:10.1145/2858036.2858228
ACC. RATE: 565/2435=23.2% | **ARC CORE A***
- C48. 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. In *Proceedings of CHI '16, the 34th ACM Conference on Human Factors in Computing Systems*. ACM, New York, NY, USA, 1934-1946. doi:10.1145/2858036.2858390
ACC. RATE: 565/2435=23% | **ARC CORE A***
- BEST PAPER AWARD**
- C49. **Radu-Daniel Vatavu**, Lisa Anthony, Quincy Brown. (2015). Child or Adult? Inferring Smartphone Users' Age Group from Touch Measurements Alone. In *Proc. of INTERACT'15, the 15th IFIP TC.13 Int. Conference on Human-Computer Interaction*. Springer, 1-9. doi:10.1007/978-3-319-22723-8_1
ACC. RATE: 85/286=29.7% | **ARC CORE A**
- C50. 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. In *Proceedings of INTERACT'15, the 15th IFIP TC.13 International Conference on Human-Computer Interaction*. Springer, 165-172. doi:10.1007/978-3-319-22723-8_14
ACC. RATE: 85/286=29.7% | **ARC CORE A**
- C51. **Radu-Daniel Vatavu**. (2015). Audience Silhouettes: Peripheral Awareness of Synchronous Audience Kinesics for Social Television. In *Proc. of TVX'15, the 2nd ACM Int. Conf. on Interactive Experiences for TV and Online Video*. ACM, New York, NY, USA, 13-22. doi:10.1145/2745197.2745207
ACC. RATE: 12/50=24.0%
- BEST PAPER AWARD**
- C52. **Radu-Daniel Vatavu**, Jacob O. Wobbrock. (2015). Formalizing Agreement Analysis for Elicitation Studies: New Measures, Significance Test, and Toolkit. In *Proceedings of CHI'15, the 33rd ACM SIGCHI Conference on Human Factors in Computing Systems*. ACM, New York, NY, USA, 1325-1334. doi:10.1145/2702123.2702223 | ACC. RATE: 495/2150=23.0% | **ARC CORE A***
- HONORABLE MENTION AWARD**
- C53. **Radu-Daniel Vatavu**, Lisa Anthony, Jacob O. Wobbrock. (2014). Gesture Heatmaps: Understanding Gesture Performance with Colorful Visualizations. In *Proceedings of ICMI'14, the 16th ACM International Conference on Multimodal Interaction*. ACM, New York, NY, USA, 172-179. doi:10.1145/2663204.2663256

ACC. RATE: 49/127=38.6% | **ARC CORE B**

- C54. Yosra Rekik, **Radu-Daniel Vatavu**, Laurent Grisoni. (2014). Understanding Users' Perceived Difficulty of Multi-Touch Gesture Articulation. In *Proceedings of ICMI'14, the 16th ACM International Conference on Multimodal Interaction*. ACM, New York, NY, USA, 232-239. doi:10.1145/2663204.2663273

ACC. RATE: 49/127=38.6% | **ARC CORE B**

- C55. **Radu-Daniel Vatavu**, Matei Mancaş. (2014). Visual Attention Measures for Multi-Screen TV. In *Proceedings of TVX'14, the ACM International Conference on Interactive Experiences for TV and Online Video*. ACM, New York, NY, USA, 111-118. doi:10.1145/2602299.2602305

ACC. RATE: 20/80=25.0%

- C56. **Radu-Daniel Vatavu**, Ionut-Alexandru Zaiți. (2014). Leap Gestures for TV: Insights from an Elicitation Study. In *Proceedings of TVX'14, the ACM International Conference on Interactive Experiences for TV and Online Video*. ACM, New York, NY, USA, 131-138. doi:10.1145/2602299.2602316

ACC. RATE: 20/80=25.0%

- C57. Yosra Rekik, **Radu-Daniel Vatavu**, Laurent Grisoni. (2014). Match-Up & Conquer: A Two-Step Technique for Recognizing Unconstrained Bimanual and Multi-Finger Touch Input. In *Proceedings of AVI'14, the 12th International Working Conference on Advanced Visual Interfaces*. ACM, New York, NY, USA, 201-208. doi:10.1145/2598153.2598167

ACC. RATE: 47/164=28.7% | **ARC CORE B**

- C58. **Radu-Daniel Vatavu**, Lisa Anthony, Jacob O. Wobbrock. (2013). Relative Accuracy Measures for Stroke Gestures. In *Proceedings of ICMI'13, the 15th ACM International Conference on Multimodal Interaction*. ACM, New York, NY, USA, 279-286. doi:10.1145/2522848.2522875

ACC. RATE: 50/133=38% | **ARC CORE B**

- C59. **Radu-Daniel Vatavu**, Matei Mancaş. (2013). Interactive TV Potpourris: An Overview of Designing Multi-screen TV Installations for Home Entertainment. In *Proceedings of INTETAIN'13, 5th Int. ICST Conference on Intelligent Technologies for Interactive Entertainment*. Lecture Notes of the Institute for Computer Sciences, 124. Springer, 49-54. doi:10.1007/978-3-319-03892-6_6

- C60. **Radu-Daniel Vatavu**. (2013). There's a World outside Your TV: Exploring Interactions beyond the Physical TV Screen. In *Proceedings of EuroITV'13, the 11th European Conference on Interactive TV and Video*. ACM, New York, NY, USA, 143-152. doi:10.1145/2465958.2465972

ACC. RATE: 21/58=36%

- C61. Ionuț-Alexandru Zaiți, **Radu-Daniel Vatavu**, Ștefan-Gheorghe Pentiuc. (2013). Exploring Hand Posture for Smart Mobile Devices. In *Proceedings of SouthCHI'13, the 1st International Conference on Human Factors in Computing and Informatics*. Lecture Notes in Computer Science, volume 7946. Springer, Berlin, 721-731. doi:10.1007/978-3-642-39062-3_52

ACC. RATE: 57/169=34%

- C62. Lisa Anthony, **Radu-Daniel Vatavu**, Jacob O. Wobbrock. (2013). Understanding the Consistency of Users' Pen and Finger Stroke Gesture Articulation. In *Proceedings of GI'13, the 39th Graphics Interface Conference*. Canadian Information Processing Society, 87-94. doi:2532129.2532145

ACC. RATE: 16/42=38% (HCI TRACK) | **ARC CORE B**

- C63. **Radu-Daniel Vatavu**, Géry Casiez, Laurent Grisoni. (2013). Small, Medium, or Large?: Estimating the User-Perceived Scale of Stroke Gestures. In *Proceedings of CHI'13, the 31st ACM SIGCHI*

Conference on Human Factors in Computing Systems. ACM, New York, NY, USA, 277-280.

doi:10.1145/2470654.2470692

ACC. RATE: 392/1963=20.0% | **ARC CORE A***

- C64. **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. In *Proceedings of AmI'12, the International Joint Conference on Ambient Intelligence*. Lecture Notes in Computer Science, volume 7683. Springer, 161-176. doi:10.1007/978-3-642-34898-3_11

ACC. RATE: 18/47=38% (LONG PAPERS)

- C65. **Radu-Daniel Vatavu**, Lisa Anthony, Jacob O. Wobbrock. (2012). Gestures as Point Clouds: A \$P Recognizer for User Interface Prototypes. In *Proceedings of ICMI'12, the 14th ACM International Conference on Multimodal Interaction*. ACM, New York, NY, USA, 273-280.



doi:10.1145/2388676.2388732

ACC. RATE: 15/74=20% (LONG PAPERS) | **ARC CORE B**

TEN-YEAR TECHNICAL IMPACT AWARD (2022)

OUTSTANDING PAPER AWARD (2012)

- C66. Cătălin Marian Chera, Wei-Tek Tsai, **Radu-Daniel Vatavu**. (2012). Gesture Ontology for Informing Service-Oriented Architectures. In *Proceedings of ISIC'12, the IEEE International Symposium on Intelligent Control*. Washington, IEEE Computer Society, 1184-1189. doi:10.1109/ISIC.2012.6398257

ARC CORE B

- C67. **Radu-Daniel Vatavu**. (2012). User-Defined Gestures for Free-Hand TV Control. In *Proceedings of EuroITV'2012, the 10th European Conference on Interactive TV and Video*. ACM, New York, NY, USA, 45-48. doi:10.1145/2325616.2325626

ACC. RATE: 31/91=34.1%

- C68. **Radu-Daniel Vatavu**. (2012). Small Gestures Go a Long Way: How Many Bits per Gesture Do Recognizers Actually Need? In *Proceedings of DIS'12, the 9th ACM International Conference on Designing Interactive Systems*. ACM, New York, NY, USA, 328-337. doi:10.1145/2317956.2318006

ACC. RATE: 90/449=20.0% | **ARC CORE B**

- C69. **Radu-Daniel Vatavu**. (2012). 1F: One Accessory Feature Design for Gesture Recognizers. *Proceedings of IUI'12, the 17th International Conference on Intelligent User Interfaces*. ACM, New York, NY, USA, 297-300. doi:10.1145/2166966.2167022

ACC. RATE: 49/212=23.1% | **ARC CORE A**

- C70. **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*. ACM, New York, NY, USA, 271-278. doi:10.1145/2070481.2070531

ACC. RATE: 47/120=39.2% | **ARC CORE B**

- C71. **Radu-Daniel Vatavu**, Daniel Vogel, Géry Casiez, Laurent Grisoni. (2011). Estimating the Perceived Difficulty of Pen Gestures. In *Proceedings of INTERACT'11, the 13th IFIP TC13 Conference on Human-Computer Interaction*. Lecture Notes in Computer Science, volume 6947. Springer, 89-106. doi:10.1007/978-3-642-23771-3_9

ACC. RATE: 111/402=27.6% | **ARC CORE A**

- C72. **Radu-Daniel Vatavu**. (2011). Reusable Gestures for Interacting with Ambient Displays in Unfamiliar Environments. In *Proceedings of ISAmI'11, the 2nd International Symposium on Ambient Intelligence*. Advances in Intelligent and Soft Computing, volume 92. Springer, 157-164. doi:10.1007/978-3-642-19937-0_20

- C73. **Radu-Daniel Vatavu**, Laurent Grisoni, Ștefan-Gheorghe Pentiu. (2010). Multiscale Detection of Gesture Patterns in Continuous Motion Trajectories. In *Proceedings of GW'09, the 8th International Gesture Workshop*. Lecture Notes in Computer Science, volume 5934. Springer, 85-97. doi:10.1007/978-3-642-12553-9_8
- C74. **Radu-Daniel Vatavu**, Laurent Grisoni, Ștefan-Gheorghe Pentiu. (2009). Gesture Recognition Based on Elastic Deformation Energies. In *Proceedings of GW'07, the 7th Int. Gesture Workshop*. Lecture Notes in Computer Science, volume 5085. Springer, 1-12. doi:10.1007/978-3-540-92865-2_1
ACC. RATE: 31/53=58%
- C75. **Radu-Daniel Vatavu**, Ștefan-Gheorghe Pentiu. (2008). Interactive Coffee Tables: Interfacing TV within an Intuitive, Fun and Shared Experience. In *Proceedings of EuroITV'08, the 6th European Interactive TV Conference*. Lecture Notes in Computer Science, volume 5066. Springer, 183-187. doi:10.1007/978-3-540-69478-6_24
ACC. RATE: 42/156=27%
- C76. **Radu-Daniel Vatavu**, Ștefan-Gheorghe Pentiu, Christophe Chaillou, Laurent Grisoni, Samuel Degrande. (2006). Visual Recognition of Hand Postures for Interacting with Virtual Environments. In *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 have been peer-reviewed at prestigious venues, where they were submitted as Work-in-Progress, Late-Breaking Work, and posters. Top-tier conferences, such as CHI, ISMAR, UIST, MobileHCI, TVX/IMX, etc. represent very selective venues even for such short papers. Venues ranked **A***, **A**, and **B** by the ARC CORE (Computing Research & Education) are highlighted.

01. 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*. ACM, New York, NY, USA, Article No. 35, 8 pages. doi:10.1145/3544549.3585695
ACC. RATE: 327/967 = 33.8% | **ARC CORE A***
02. 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*. ACM, New York, NY, USA, Article No. 216, 8 pages. doi:10.1145/3544549.3585590
ACC. RATE: 327/967 = 33.8% | **ARC CORE A***
03. 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*. ACM, New York, NY, USA, Article No. 165, 8 pages. doi:10.1145/3544549.3585771
ACC. RATE: 327/967 = 33.8% | **ARC CORE A***
04. Alexandru-Ionuț Șiean, Cristian Pamparău, **Radu-Daniel Vatavu**. (2022). Scenario-based Exploration of Integrating Radar Sensing into Everyday Objects for Free-Hand Television Control. In *Proceedings of IMX '22, the ACM International Conference on Interactive Media Experiences*. ACM, New York, NY, USA, 357-362. doi:10.1145/3505284.3532982

05. Santiago Villarreal-Narvaez, Alexandru-Ionuț Șiean, Arthur Sluyters, **Radu-Daniel Vatavu**, Jean Vanderdonckt. (2022). Informing Future Gesture Elicitation Studies for Interactive Applications that Use Radar Sensing. In *Proceedings of AVI '22, the International Conference on Advanced Visual Interfaces*. ACM, New York, NY, USA, 50:1-50:3 pages. doi:10.1145/3531073.3534475

ARC CORE B

06. Alexandru-Tudor Andrei, Alexandru-Ionut Siean, **Radu-Daniel Vatavu**. (2022). Tap4Light: Smart Lighting Interactions by Tapping with a Five-Finger Augmentation Device. In *Proceedings of AH '22, the 13th Augmented Human International Conference*. ACM, New York, NY, USA, Article 4, 1–2. doi:10.1145/3532525.3532535

07. **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*. ACM, New York, NY, USA, Article no. 362, 1-8. doi:10.1145/3491101.3519710

ACC. RATE: 258/722 = 35.7% | **ARC CORE A***

08. 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*. ACM, New York, NY, USA, Article no. 286, 1-7. doi:10.1145/3491101.3519704

ACC. RATE: 258/722 = 35.7% | **ARC CORE A***

09. Ovidiu-Andrei Schipor, Laura-Bianca Bilius, Ovidiu-Ciprian Ungurean, Alexandru-Ionuț Siean, Alexandru-Tudor Andrei, **Radu-Daniel Vatavu**. (2022). Personalized Wearable Interactions with WearSkill. *Proceedings of W4A '22, the 19th Web for All Conference*. ACM, New York, NY, USA, Article no. 8, 1-2. doi:10.1145/3493612.3520474



ACCESSIBILITY CHALLENGE JUDGES' AWARD

ACCESSIBILITY CHALLENGE DELEGATES' AWARD

10. David Geerts, **Radu-Daniel Vatavu**, Alisa Burova, Vinoba Vinayagamoorthy, Martez Mott, Michael Crabb, Kathrin Gerling. (2021). Challenges in Designing Inclusive Immersive Technologies. In *Proceedings of MUM '21, the 20th International Conference on Mobile and Ubiquitous Multimedia*. ACM, New York, NY, USA, 182-185. doi:10.1145/3490632.3497751

ARC CORE B

11. 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. In *Proceedings of MUM '21, the 20th International Conference on Mobile and Ubiquitous Multimedia*. ACM, New York, NY, USA, 195-197. doi:10.1145/3490632.3497830

ARC CORE B

12. Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**. (2021). Software Architecture Based on Web Standards for Gesture Input with Smartwatches and Smartglasses. In *Proceedings of MUM '21, the 20th International Conference on Mobile and Ubiquitous Multimedia*. ACM, New York, NY, USA, 186-188. doi:10.1145/3490632.3497780

ARC CORE B

13. Mihail Terenti, **Radu-Daniel Vatavu**. (2021). How Do HCI Researchers Describe Their Software Tools? Insights from a Synopsis Survey of Tools for Multimodal Interaction. In *Companion Publication of the 2021 International Conference on Multimodal Interaction (ICMI '21 Companion)*. ACM, New York, NY, USA, 7-12. doi:10.1145/3461615.3485431

ACC. RATE (LBR): 7/25 = 28.0% | **ARC CORE B**

14. Laura-Bianca Bilius, **Radu-Daniel Vatavu**. (2021). Demonstration of GestuRING, a Web Tool for Ring Gesture Input. In *The Adjunct Publication of UIST '21, the 34th Annual ACM Symposium on User Interface Software and Technology*. ACM, New York, NY, USA, 124-125.
[doi:10.1145/3474349.3480199](https://doi.org/10.1145/3474349.3480199)

ARC CORE A*

15. **Radu-Daniel Vatavu**. (2021). Accessibility of Interactive Television and Media Experiences: Users with Disabilities Have Been Little Voiced at IMX and TVX. In *Proceedings of IMX '21, the ACM International Conference on Interactive Media Experiences*. ACM, New York, NY, USA, 218-222.
[doi:10.1145/3452918.3465485](https://doi.org/10.1145/3452918.3465485)
16. 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. In *Proceedings of IMX '21, the ACM International Conference on Interactive Media Experiences (Virtual Event)*. ACM, New York, NY, USA, 275-279. [doi:10.1145/3452918.3465484](https://doi.org/10.1145/3452918.3465484)
17. 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. In *Proceedings of MUM '20, the 19th International Conference on Mobile and Ubiquitous Multimedia*. ACM, New York, NY, USA, 323-325. [doi:10.1145/3428361.3432088](https://doi.org/10.1145/3428361.3432088)
18. 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. In *Proceedings of MUM '20, the 19th International Conference on Mobile and Ubiquitous Multimedia*. ACM, New York, NY, USA, 326-328. [doi:10.1145/3428361.3432089](https://doi.org/10.1145/3428361.3432089)
19. 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. In *Proceedings of MUM '20, the 19th International Conference on Mobile and Ubiquitous Multimedia*. ACM, New York, NY, USA, 329-331.
[doi:10.1145/3428361.3432080](https://doi.org/10.1145/3428361.3432080)
20. **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. In *Proceedings of DIS '20 Companion, the Companion Publication of the 2020 ACM Conference on Designing Interactive Systems*. ACM, New York, NY, USA, 85-90. [doi:10.1145/3393914.3395896](https://doi.org/10.1145/3393914.3395896)

ACC. RATE: 50/199 = 25.1% | **ARC CORE B**

21. 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. In *Proceedings of DIS '20 Companion, the Companion Publication of the 2020 ACM Conference on Designing Interactive Systems*. ACM, New York, NY, USA, 299-304. [doi:10.1145/3393914.3395851](https://doi.org/10.1145/3393914.3395851)

ACC. RATE: 50/199 = 25.1% | **ARC CORE B**

22. Laura-Bianca Bilius, **Radu-Daniel Vatavu**. (2020). A Synopsis of Input Modalities for In-Vehicle Infotainment and Consumption of Interactive Media. In *Proceedings of IMX '20, the ACM International Conference on Interactive Media Experiences*. ACM, New York, NY, USA, 195-199.
[doi:10.1145/3391614.3399400](https://doi.org/10.1145/3391614.3399400)
23. Ovidiu-Andrei Schipor, **Radu-Daniel Vatavu**, Wenjun Wu. (2019). Integrating Peripheral Interaction into Augmented Reality Applications. In *Proceedings of ISMAR '19 Adjunct, the 18th International*

Symposium on Mixed and Augmented Reality. IEEE, USA, 341-342. doi:10.1109/ISMAR-Adjunct.2019.00-12

ARC CORE A*

24. Irina Popovici, **Radu-Daniel Vatavu**. (2019). Consolidating the Research Agenda of Augmented Reality Television with Insights from Potential End-Users. In *Proceedings of ISMAR '19 Adjunct, the 18th International Symposium on Mixed and Augmented Reality*. IEEE, USA, 73-74. doi:10.1109/ISMAR-Adjunct.2019.00033

ARC CORE A*

25. Irina Popovici, **Radu-Daniel Vatavu**. (2019). Towards Visual Augmentation of the Television Watching Experience: Manifesto and Agenda. In *Proceedings of TVX '19, the 2019 ACM International Conference on Interactive Experiences for TV and Online Video*. ACM, New York, NY, USA, 199-204. doi:10.1145/3317697.3325121
26. Irina Popovici, **Radu-Daniel Vatavu**, Wenjun Wu. (2019). TV Channels in Your Pocket! Linking Smart Pockets to Smart TVs. In *Proceedings of TVX '19, the 2019 ACM International Conference on Interactive Experiences for TV and Online Video*. ACM, New York, NY, USA, 193-198. doi:10.1145/3317697.3325119
27. Ovidiu-Ciprian Ungurean, **Radu-Daniel Vatavu**, Luis A. Leiva, Daniel Martín-Albo. (2018). Predicting stroke gesture input performance for users with motor impairments. In *Proceedings of MobileHCI '18 Adjunct, the 20th International Conference on Human-Computer Interaction with Mobile Devices and Services*. ACM, New York, NY, USA, 23-30. doi:10.1145/3236112.3236116

ARC CORE B

28. Bogdan-Florin Gheran, **Radu-Daniel Vatavu**, Jean Vanderdonckt. (2018). Ring x2: Designing Gestures for Smart Rings using Temporal Calculus. In *Proceedings of DIS '18 Companion, the 2018 ACM Conference Companion Publication on Designing Interactive Systems*. ACM, New York, NY, USA, 117-122. doi:10.1145/3197391.3205422
ACC. RATE: 50/107 = 46.7% | **ARC CORE B**
29. Jean-Yves Lionel Lawson, Jean Vanderdonckt, **Radu-Daniel Vatavu**. (2018). Mass-Computer Interaction for Thousands of Users and Beyond. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems*. New York: ACM Press, Paper LBW032. doi:10.1145/3170427.3188465
ACC. RATE: 255/641 = 39.8% | **ARC CORE A***
30. 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. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems*. New York: ACM Press, Paper LBW537. doi:10.1145/3170427.3188619
ACC. RATE: 255/641 = 39.8% | **ARC CORE A***
31. 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*. ACM, New York, NY, USA, Article 60. doi:10.1145/3180308.3180369
32. Dorin-Mircea Popovici, **Radu-Daniel Vatavu**, Mihai Polceanu. (2015). GRASPhere: A Prototype to Augment Indirect Touch with Grasping Gestures. In *Proceedings of the 14th International Conference on Mobile and Ubiquitous Multimedia (MUM '15)*. ACM, New York, NY, USA, 350-354. doi: 10.1145/2836041.2841206

CHAPTERS IN BOOKS

- B01. **Radu-Daniel Vatavu.** (2023). Gesture-based Interaction. In: J. Vanderdonckt, P. Palanque, M. Winckler (Eds.) *Handbook of Computer Interaction*. Springer, Cham, 47 pages. doi:10.1007/978-3-319-27648-9_20-1
- B02. 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* (pp. 211-235). Series in Machine Perception and Artificial Intelligence, volume 88. World Scientific Publishing. doi:10.1142/9789811226830_0010
- B03. 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* (pp. 33-46). Springer. doi:10.1007/978-3-319-45853-3_3
- B04. **Radu-Daniel Vatavu**, Ovidiu-Ciprian Ungurean, Ștefan-Gheorghe Pentiu. (2011). Body Gestures for Office Desk Scenarios. In D. England (Ed.), *Whole Body Interaction* (pp. 163-172). Springer Human-Computer Interaction Series. London: Springer-Verlag. doi:10.1007/978-0-85729-433-3_13
- B05. **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* (pp. 1-19). Springer Studies in Computational Intelligence, volume 332. Springer. doi:10.1007/978-3-642-17554-1_1
- B06. **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* (pp. 121-139), Springer Human-Computer Interaction Series. doi:10.1007/978-1-84882-701-1_12
- B07. **Radu-Daniel Vatavu.** (2009). Interfaces that Should Feel Right: Natural Interaction with Multimedia Information. In M. Grgic, K. Delac, M. Ghanbari (Eds.), *Recent Advances in Multimedia Signal Processing and Communications* (pp. 145-170). Springer Studies in Computational Intelligence, volume 231. Springer. doi:10.1007/978-3-642-02900-4_7

WORKSHOP COMMUNICATIONS

- W01. 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* (in conjunction with ACM EICS '19). http://ceur-ws.org/Vol-2503/paper1_12.pdf
- W02. **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* (pp. 245-248). Springer Communications in Computer and Information Science vol. 277. Springer, Berlin. doi:10.1007/978-3-642-31479-7_42
- W03. **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. Tampere University of Technology, 8-13. <http://www.ambientmediaassociation.org/Journal/index.php/series/article/view/174>
- W04. **Radu-Daniel Vatavu.** (2009). Enhancing Human-Human Interactions through Emotional Responsive Ambient Media. In *Proceedings of SAME'2009, the 2nd Workshop on Semantic Ambient Media Experience* (in conjunction with AmI' 09)

- W05. **Radu-Daniel Vatavu**, Ovidiu Ciprian Ungurean, Ștefan-Gheorghe Pentiu. (2009). Gestures for your Workplace: Investigating Body Interaction for Everyday Desk Scenarios. In *Proceedings of WBI'2009, the 3rd Workshop on Whole Body Interaction* (in conjunction with CHI '09)
- W06. Ovidiu Ciprian Ungurean, Ștefan-Gheorghe Pentiu, **Radu-Daniel Vatavu**. (2009). Use Your Head: An Interface for Computer Games using Head Gestures. In *Proceedings of GW'09, the 8th International Gesture Workshop*. <https://www.techfak.uni-bielefeld.de/ags/wbski/GW2009/page6/page6.html>
- W07. **Radu-Daniel Vatavu**, Ștefan-Gheorghe Pentiu, Tudor Ioan Cerlincă. (2007). Bringing Context into Play: Supporting Game Interaction through Real-Time Context Acquisition. In *Proceedings of WMISI'07, the Workshop on Multimodal Interfaces in Semantic Interaction at ICMI'2007*, 3-8. ACM, New York, NY, USA. doi:10.1145/1330572.1330573
- W08. **Radu-Daniel Vatavu**, Ștefan-Gheorghe Pentiu. (2005). A Graphical User Interface with Real-Time Information Feedback for a Video Camera Controlled Arm Robot. In *Proceedings of IWCIT'2005, the International Workshop of Control and Information Technologies*. Technical Univ. of Ostrava, 49-54.

KEYNOTES, COURSES, and TUTORIALS

01. **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*. ACM, New York, NY, USA, Article no. 140, 1-3. doi:10.1145/3491101.3503763 | **ARC CORE A***
02. **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>
03. **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>
04. **Radu-Daniel Vatavu**. (2020). Digital Environments for Supporting and Amplifying Motor and Learning Skills. Keynote at the *2020 ATEE Winter Conference*. <https://atee2020.education>
05. Jean Vanderdonckt, **Radu-Daniel Vatavu**. (2018). Designing, Engineering, and Evaluating Gesture User Interfaces. Course at CHI '18. In *Proceedings of CHI EA '18, the 2018 CHI Conference Extended Abstracts on Human Factors in Computing Systems*. ACM, New York, NY, USA. doi:10.1145/3170427.3170648 | **ARC CORE A***
06. **Radu-Daniel Vatavu**. (2017). Fundamentals of Gesture Production, Recognition, and Analysis. Course at CHI '17. In *Proceedings of CHI EA '17, the CHI Extended Abstracts on Human Factors in Computing Systems*. ACM, New York, NY, USA, 1174-1177. doi:10.1145/3027063.3027106 | **ARC CORE A***
07. **Radu-Daniel Vatavu**. (2016). Tools for Designing for Home Entertainment: Gesture Interfaces, Augmented Reality, and Smart Spaces. Course at CHI '16. In *Proceedings of CHI EA '16, the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems*. ACM, New York, NY, USA, 1003-1006. doi:10.1145/2851581.2856676 | **ARC CORE A***
08. **Radu-Daniel Vatavu**. (2015). Gesture Interfaces, Ambient Intelligence, and Augmented Reality for the Interactive TV. Tutorial at TVX '15. In *Proceedings of TVX '15, the ACM International Conference on Interactive Experiences for TV and Online Video*. ACM, New York, NY, USA, 197-198 doi:10.1145/2745197.2745698

09. **Radu-Daniel Vatavu.** (2014). Designing New Interactive TV Applications with Gestures, Ambient Intelligence, and Augmented Reality. Tutorial at TVX '14. In *Adjunct Proceedings of TVX'14, the ACM International Conference on Interactive Experiences for TV and Online Video*
10. **Radu-Daniel Vatavu.** (2013). Designing Gestural Interfaces for the Interactive TV. Tutorial at EuroITV '13. In *Proceedings of EuroITV'2013, the 11th European Conference on Interactive TV and Video*. New York: ACM Press, 167-168. doi:10.1145/2465958.2465981
11. **Radu-Daniel Vatavu.** (2012). Designing Gestural Interfaces for Future Home Entertainment Environments. Tutorial at EuroITV '13. In the *Adjunct Proceedings of EuroITV'2012, the 10th European Conference on Interactive TV and Video*. Fraunhofer Institute for Open Communication Systems, Berlin, 136-137

THESES

01. **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
02. **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

Note: My research has received support from UEFISCDI (the Romanian Executive Agency for Funding Higher Education, Research, Development, and Innovation), Agence Universitaire de la Francophonie (AUF), Wallonie-Bruxelles International (WBI) Belgium, OeAD Austria, Ministry of Science and Technology of China, and the European Commission through the European Social Fund, FP7, COST, and H2020 programmes, the Increase of Economic Competitiveness Fund, and the EUCogIII research network. Note that some national competitions, such as UEFISCDI's "Young Independent Research Teams" are very competitive with funding rates of 10-12%. Where available, funding rates are also provided below as well as the evaluation scores that each project received post-implementation.

P₁₈. **Sensorimotor Realities**

- Role: Principal Investigator
- Funded by UEFISCDI, Romania (PNIII P4, "Fundamental and frontier research, Exploratory research projects" grant scheme, contract no. PCE29/2021) with a budget of approx. 250,000€
- Implementation during January 2021 and December 2023 (36 months) with the goal to conceptualize, design, and implement Sensorimotor Realities, a new type of physical-digital reality
- Funding rate 23.2% (244 projects were funded from 1053 submitted) – the project was **ranked 9th place** in the area of Computer Science
- Web page: <http://www.eed.usv.ro/mintviz/projects/SensorimotorRealities>

P₁₇. **Radar-based Sensing Algorithms, Techniques, and Applications for Novel Interactions with Computing Systems**

- Role: Co-Principal Investigator with [Jean Vanderdonckt](#) (Université catholique de Louvain, Belgium)

- Funded by UEFISCDI, Romania (PNIII P3, “European and International Cooperation” grant scheme, contract no.) and Wallonie Bruxelles International, Belgium with a combined budget of approx. 10,000€ to cover mobility between partners
- Implementation during January 2021 and December 2022 (24 months) in cooperation with Université catholique de Louvain, Belgium with a mixed team of faculty members and PhD students. The goal is to explore applications of radar-based gesture sensing.
- Funding rate 79.2% (19 projects were funded from 24 submitted) – the project was **ranked 1st place** out of 24 submitted applications
- Web page: <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

- Role: Principal Investigator
- Funded by UEFISCDI, Romania (PNIII P3, “Awarding participation in Horizon 2020” grant scheme, contract no. 12/2021) with a budget of approx. 16,000€
- Implementation during January 2021 and December 2022 (24 months) with the goal to consolidate and increase the capacity for scientific research and the international visibility of the MintViz lab
- Funding rate 77.4% (48 projects were funded from 62 submitted)
- Web page: <http://www.eed.usv.ro/mintviz/projects/MintVizAwardingParticipationH2020>

P₁₅. WearSkill: Motor-Streamlined Interactions with Smart Wearables

- Role: Principal Investigator
- Funded by UEFISCDI, Romania (PNIII P2, “Demonstrative Experimental Project” grant scheme, contract no. 276PED/2017) with a budget of approx. 125,000€
- Implementation during August 2020 and August 2022 (24 months) with a team of 5 researchers. The goal is to develop new technology to increase the accessibility of smart wearables, such as smartglasses, watches, and rings for people with upper-body motor impairments
- Funding rate: **14.8%** (316 projects funded from 2,140 submitted) – the project was **ranked 3rd place** in the area of ICT, Space, and Security
- Web page: <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

- Role: Co-Principal Investigator with [Adrian Opre](#) (Babeş-Bolyai University)
- Funded by UEFISCDI, Romania (PNIII P2, “Demonstrative Experimental Project” grant scheme, contract no. 276PED/2017) with a budget of approx. 125,000€
- Implementation during August 2020 and August 2022 (24 months) with a team of 5 researchers. The goal is to develop a Mixed Reality experimental model for the evaluation of a trans diagnostic mechanism, Implicit Social Learning, for Depression and Autism Spectrum Disorders
- Funding rate: **14.8%** (316 projects funded from 2,140 submitted) – the project was **ranked 13rd place** in the area of Health
- Web page: <http://www.eed.usv.ro/mintviz/projects/ISELMIR>

P₁₃. Multimodal Haptic with Touch Devices

- Role: Co-Principal Investigator for University of Suceava
- Project coordinated by Université de Lille, France with partners Université catholique de Louvain, Fondazione Istituto Italiano di Tecnologia, University Ştefan cel Mare of Suceava, Università Degli Studi di Genova, Go Touch VR SAS, Verbund Katholischer Kliniken Dusseldorf, and Hap2U

- Funded by 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 University of Suceava
- Implementation during March 2020 and February 2024 (48 months) 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 proposals funded from 1,346 submitted)
- Web page: <https://cordis.europa.eu/project/id/860114>; <https://multitouch-itn.eu/project>

P₁₂. **Sensory Augmentation for Low-Vision Conditions using Smart Wearables**

- Role: Principal Investigator
- Funded by UEFISCDI, Romania (PNIII P1, "Young Independent Research Teams" grant scheme, contract no. TE141/2018) with a budget of approx. 100,000€
- Implementation during October 2018 and October 2020 (24 months) with a team of 3 faculty members and 2 PhD students. The goal was to design new interactive technology for smartglasses and HMDs to enhance visual perception for people with and without low vision
- Funding rate **12.5%** (142 projects funded from 1,131 submitted) – the project was **ranked 7th place** in the area of Mathematics and Informatics. The project received the **"A" score** in the post-implementation evaluation for the quality of its scientific results
- Web page: <http://www.eed.usv.ro/mintviz/projects/Senses++>

P₁₁. **Efficient Communications based on Smart Devices for In-Car Augmented Reality Interactive Applications**

- Role: Co-Principal Investigator with [Mircea Popovici](#) (Ovidius University of Constanța, Romania)
- Funded by UEFISCDI, Romania (PNIII P1, "Complex Consortium Projects" grant scheme, contract no. 21PCCDI/2018) with a budget of approx. 225,000€. The project was part of the complex multi-project proposal "Hybrid Light Visible Communication Platform and Augmented Reality for the Development of Intelligent Systems for Active Assistance and Safety of Vehicles" (PN-III-P1-1.2-PCCDI-2017-0917) with Principal Investigator [Mihai Dimian](#) (University of Suceava)
- Implementation during May 2018 and September 2021 (40 months) with the goal to design interactive technology for in-vehicle augmented reality applications
- Funding rate **22.9%** (87 projects were funded from 380 submitted)
- Web page: <http://www.eed.usv.ro/mintviz/projects/CarSafe>

P₁₀. **New Interaction Techniques for Smart Environments at the Periphery of User Attention**

- Role: Co-Principal Investigator with [Wenjun Wu](#) (Beihang University, China)
- Funded by UEFISCDI, Romania (PNIII P3, "European and International Cooperation" grant scheme, contract no. 3BM/2018) and the Ministry of Science and Technology, China with a budget of approx. 8,200€ to cover mobility between partners
- Implementation during July 2018 and December 2019 (18 months) with the goal to design and develop peripheral interaction techniques for smart environments
- Funding rate 33.7% (29 projects were funded from 86 submitted) – the project was **ranked 3rd place** out of 86 applications
- Web page: <http://www.eed.usv.ro/mintviz/projects/PeriphInt>

P₉. **MotorSkill: Effective Gesture Interactions with Touch Surfaces for Motor Impairment Conditions**

- Role: Principal Investigator

- Funded by UEFISCDI, Romania (PNIII P2, “Demonstrative Experimental Project” grant scheme, contract no. 209PED/2017) with a budget of approx. 103,000€
- Implementation during August 2017 and December 2018 (17 months) with a team of 6 faculty members and one PhD student. The goal was to design effective touch gesture input techniques for users with motor impairments assisted by voice input, eye gaze tracking, and EEG analysis
- Funding rate: **12.1%** (252 projects funded from 2,074 submitted) – the project was ranked 36th place in the area of ICT, Space, and Security. The project received the “**A**” score in the post-implementation evaluation for the quality of its scientific results
- Web page: <http://www.eed.usv.ro/mintviz/projects/MotorSkill>

P₈. Computational Psychology of Human Movement to Understand Gestures and Body Kinesics

- Role: Co-Principal Investigator with [Jean Vanderdonckt](#) (Université catholique de Louvain, Belgium)
- Funded by UEFISCDI, Romania (PNIII P3, “European and International Cooperation” grant scheme, contract no. 101BM/2017) and Wallonie Bruxelles International, Belgium with a combined budget of approx. 9,500€ to cover mobility between partners
- Implementation during January 2017 and December 2018 (24 months) in cooperation with Université catholique de Louvain, Belgium with a mixed team of faculty members and PhD students. The goal was to strengthen the collaboration between the two institutions and to develop new methodology and a software tool for whole-body gesture analysis
- Funding rate 55.1% (16 projects were funded from 29 submitted) – the project was **ranked 7th place** out of 29 applications
- Web page: <http://www.eed.usv.ro/mintviz/projects/PSYKINESICS>

P₇. Interaction Techniques with Massive Data Clouds in Smart Environments

- Role: Co-Principal Investigator with [Wenjun Wu](#) (Beihang University, China)
- Funded by UEFISCDI, Romania (PNIII P3, “European and International Cooperation” grant scheme, contract no. 47BM/2016) and the Ministry of Science and Technology, China with a budget of approx. 8,200€ to cover staff/student mobility between the partners
- Implementation during October 2016 and December 2017 (15 months) in cooperation with Beihang University, China with a mixed team of faculty members and PhD students. The goal was to develop interaction techniques and data visualizations for smart environments
- Funding rate 30.4% (28 projects funded from 92 submitted) – the project was **ranked 5th place** out of 29 applications
- Web page: <http://www.eed.usv.ro/mintviz/projects/InteractCloud>

P₆. Gesture Interfaces for Visually-Impairing Interaction Contexts

- Role: Principal Investigator
- Funded by UEFISCDI, Romania (PNII “Young Independent Research Teams” grant scheme, contract no. 47/2015) with a budget of approx. 120,000€
- Implementation during October 2015 and September 2017 (24 months) with a team of 3 faculty members and 2 PhD students. The goal was to design efficient gesture recognition on touchscreen devices for contexts of use involving physiological and situational visual impairments
- Funding rate **13.1%** (386 projects funded from 2,961 submitted)–the project was **ranked 10th place** in the area of Mathematics and Informatics. The project received the “**A+**” score in the post-implementation evaluation for the quality of its scientific results

- Web page: <http://www.eed.usv.ro/mintviz/projects/GIVISIMP>

P₅. Multimodal Feedback for Supporting Gesture Interaction in Smart Environments

- Role: Co-Principal Investigator with [Hannes Kaufmann](#) (Technical University of Vienna)
- Funded by UEFISCDI, Romania & OeAD, Austria (PNII "European and International Cooperation" grant scheme, contract no. 740/2014) with a budget of approx. 7,000€
- Implementation during January 2014 and December 2015 (24 months) in cooperation with Technical University of Vienna, Austria with a mixed team of faculty members and students. The goal of the project was to design and implement feedback for gesture input
- Funding rate 51.2% (21 projects funded from 41 submitted) – the project was **ranked 4th place** out of 21 applications
- Web page: <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

- Role: Co-Principal Investigator with [Matei Mancaş](#) (University of Mons, Belgium)
- Funded by UEFISCDI, Romania & Wallonie Bruxelles International, Belgium (PNII "European and International Cooperation" grant scheme, contract no. 588/2012) with a budget of approx. 5,000€
- Implementation during September 2012 and September 2014 (24 months) in cooperation with University of Mons, Belgium with a mixed team of faculty members and PhD students. The goal was to analyze gesture input performed by children and develop an educational application
- Web page: <http://www.eed.usv.ro/mintviz/projects/InteractEDU>

P₃. Context-dependent gesture interaction

- I was awarded a post-doctoral scholarship between July 2010 and February 2013 (30 months) within the project "Progress and development through post-doctoral research and innovation in engineering and applied sciences - PRIDE" (POSDRU/89/1.5/S/57083) representing an award of approximately 30,000€. The goal was to develop high-performing algorithms for gesture recognition in various contexts of use and application scenarios for gesture-based interaction.

P₂. Wallonie-Bruxelles International post-doctoral scholarship

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

P₁. AUF International PhD scholarships

- I was awarded three doctoral scholarships from Agence Universitaire de la Francophonie (AUF) during September 2005 – August 2006 (12 months), September 2006 – August 2007 (12 months), and September – December 2007 (4 months) to fund my Ph.D. research in gesture-based user interfaces for virtual environments

I was also a member of the Management Committee of the ICT COST IC1307 action "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"

- Funded by the European Commission (COST) during March 2014 – March 2018 (48 months)
- The goal of the network was to create a European community around integrated modeling of vision and language, applications of integrated models, automatic generation of image and video descriptions, image and video search

- Web page: <https://www.cost.eu/actions/IC1307>

SCIENTIFIC AWARDS & DISTINCTIONS

A₂₀. **Honorable Mention Award, CHI 2023**

At the ACM CHI Conference on Human Factors in Computing systems – CHI '23 (Hamburg/Germany, April 2023) for the paper *"iFAD Gestures: Understanding Users' Gesture Input Performance with Index-Finger Augmentation Devices"*. doi: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, April 2023) 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

A₁₈. **Ten-Year Technical Impact Award, ICMI 2022**

At the 24th ACM International Conference on Multimodal Interaction – ICMI '22 (Bengaluru/India, November 2022) 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

A₁₇. **Accessibility Challenge Judges' Award, W4A 2022**

At the 19th Web for All Conference – W4A '22 (Lyon/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 Șiean, and Alexandru-Tudor Andrei. doi:10.1145/3493612.3520474

A₁₆. **Accessibility Challenge Delegates' Award, W4A 2022**

At the 19th Web for All Conference – W4A '22 (Lyon/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 Șiean, and Alexandru-Tudor Andrei. doi:10.1145/3493612.3520474

A₁₅. **Best Application Paper Award, ISAmI 2021**

At the International Symposium on Ambient Intelligence – ISAmI '21 (Salamanca, Spain, October 2021) 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

A₁₅. **Best Paper Award, IMX 2021**

At the ACM International Conference on Interactive Media – IMX '21 (Virtual Event, June 2021) 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

A₁₄. **Honorable Mention Award, IMX 2020**

At the ACM International Conference on Interactive Media – IMX '20 (Virtual Event, June 2020) 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

- A₁₃. **“Mihai Drăganescu” Award of the Romanian Academy, 2019**
For my work on “smart pockets” published in 2017 in the International Journal of Human-Computer Studies “*Smart-Pockets: Body-Deictic Gestures for Fast Access to Personal Data during Ambient Interactions*”. doi:10.1016/j.ijhcs.2017.01.005
The Romanian Academy represents Romania’s highest, most prestigious cultural and scientific forum.
- A₁₂. **Honorable Mention Award, EICS 2019**
At the 11th ACM SIGCHI Symposium on Engineering Interactive Computing Systems – EICS ‘19 (Valencia, Spain, June 2019) for the paper “*AB4Web: An On-Line A/B Tester for Comparing User Interface Design Alternatives*” co-authored with Jean Vanderdonckt and Mathieu Zen.
<https://doi.org/10.1145/3331160>
- A₁₁. **Best Tech Note Award, EICS 2019**
At the 11th ACM SIGCHI Symposium on Engineering Interactive Computing Systems – EICS ‘19 (Valencia, Spain, June 2019) 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. <https://doi.org/10.1145/3319499.3328227>
- A₁₀. **Honorable Mention Award, MobileHCI 2018**
At the 20th ACM International Conference on Human-Computer Interaction with Mobile Devices and Services - MobileHCI’18 (Barcelona, Spain, September 2018) 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. <https://doi.org/10.1145/3229434.3229465>
- A₉. **Best Paper Award, CHI 2016**
At the 34th ACM SIGCHI Conference on Human Factors in Computing Systems – CHI’16 (San Jose, CA, USA, May 2016) 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, and Jacob O. Wobbrock. <https://doi.org/10.1145/2858036.2858390>
- A₈. **Best Paper Award, TVX 2015**
At the ACM International Conference on Interactive Experiences for TV and Online Video – TVX ‘15 (Brussels, Belgium, June 2015) for the paper “*Audience Silhouettes: Peripheral Awareness of Synchronous Audience Kinesics for Social Television*”. <https://doi.org/10.1145/2745197.2745207>
- A₇. **“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, April 2015) for the paper “*Formalizing Agreement Analysis for Elicitation Studies: New Measures, Significance Test, and Toolkit*” co-authored with Jacob O. Wobbrock.
<https://doi.org/10.1145/2702123.2702223>
- A₆. **“Young Researcher of the Year” Award, 2013**
Awarded by the Ștefan cel Mare University of Suceava
- A₅. **Outstanding Paper Award, ICMI 2012**
At the ACM International Conference on Multimodal Interaction - ICMI’12 (Santa Monica, California, USA, Oct. 2012) for the paper “*Gestures as Point Clouds: A \$P Recognizer for User Interface Prototypes*” co-authored with Lisa Anthony and Jacob O. Wobbrock.
<https://doi.org/10.1145/2388676.2388732>
- A₄. **“Professor Bologna” Award, 2010**

Awarded by the National Association of Students, Romania

A₃. Recipient of 17 prizes for scientific research results from UEFISCDI, 2008 – 2021, including a “Research of Excellence” Award (2017)

Awarded by CNCSIS–UEFISCDI, the Romanian National Council for Research, Ministry of Education and Research (ro: PNII/PNIII Premiarea rezultatelor cercetării)

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 and events in Mathematics and Computer Science, including the Romanian National Olympiad in Informatics

TEACHING

Currently teaching

Randomized Algorithms and Metaheuristics (1st year Master’s in Computer Science)

28h course + 14h practical applications

Topics covered: randomized algorithms, heuristic search, ant colony optimization

Ambient Intelligence and Augmented Reality (2nd year Master’s in Computer Science)

21h course + 14h practical applications

Topics covered: ambient intelligence, ambient media, ubiquitous computing, augmented reality

Natural Human-Computer Interaction (1st year Master’s in Computer Science)

14h course + 14h practical applications

Topics covered: gesture recognition, multimodal interaction

Algorithms Design (3rd Year Bachelor Studies in Computer Science)

42h course + 21h practical applications

Topics covered: algorithmic complexity, programming techniques, Divide and Conquer, dynamic programming, graph theory

Former teaching

Computer Network Programming (1st year Master’s in Computer Science)

Topics covered: sockets TCP/IP communications, interfacing external services and devices, connecting to databases, web, file, and email servers, designing network applications

Virtual Environments for Communication and Socialization (Master’s in Educational Sciences)

Topics covered: virtual and augmented reality, communication in social networks

PHD RESEARCH SUPERVISION

- **Mihail Terenti**, PhD student in Computer Science, started in October 2021, ongoing
- **Adrian-Vasile Catană**, PhD student in Computer Science, started in October 2021, ongoing
- **Alexandru Tudor Andrei**, PhD student in Computer Science, started in October 2021, ongoing

- **Cristian Pamparău**, PhD student in Computer Science, started in October 2020, ongoing
- **Alexandru-Ionuț Șiean**, PhD student in Computer Science, started in October 2019, ongoing
- **Adrian Aiordăchioae**, PhD student in Computer Science, started in October 2018, ongoing
- **Irina Popovici**, PhD student in Computer Science, started in October 2016, ongoing
- **Bogdan-Florin Gheran**, PhD student in Computer Science between October 2015 and September 2019, defended his PhD thesis "Gesture Interfaces for Mobile and Wearable Devices" in September 2019 with a "Magna Cum Laude" distinction

INVOLVEMENT IN THE COMMUNITY

MAJOR ROLES (reverse chronological order)

Associate Chair for [CHI 2023](#), the ACM Conference on Human Factors in Computing Systems (Hamburg, Germany) (Blending Interaction: Engineering Interactive Systems & Tools Subcommittee)

Editorial Board member/Associate Chair for [EICS 2023](#), the 15th ACM SIGCHI Symposium on Engineering Interactive Computing Systems

Associate Chair for [MobileHCI 2023](#), the 24th ACM International Conference on Human-Computer Interaction with Mobile Devices and Services (Athens, Greece)

Associate Chair for [UIST 2022](#), the 35th Annual ACM Symposium on User Interface Software and Technology (Bend, Oregon, USA)

Associate Chair for [ISMAR 2022](#), 21st IEEE International Symposium on Mixed and Augmented Reality (Singapore)

Associate Chair for [MobileHCI 2022](#), the 23rd ACM International Conference on Human-Computer Interaction with Mobile Devices and Services (Vancouver, Canada)

Associate Chair for [CHI 2022](#), the 40th ACM Conference on Human Factors in Computing Systems (New Orleans, LA, USA) (Blending Interaction: Engineering Interactive Systems & Tools Subcommittee)

Associate Chair for [ISMAR 2021](#), the 20th IEEE International Symposium on Mixed and Augmented Reality (Bari, Italy)

Associate Chair for [MobileHCI 2021](#), the 22nd ACM International Conference on Human-Computer Interaction with Mobile Devices and Services (Toulouse, France)

Associate Chair for [CHI 2021](#), the 39th ACM Conference on Human Factors in Computing Systems (Yokohama, Japan) (Engineering Interactive Systems Subcommittee)

Associate Chair for [UIST 2020](#), the ACM Symposium on User Interface Software and Technology (Minneapolis, Minnesota, USA)

Associate Chair for [IMX 2020](#), the ACM International Conference on Interactive Media Experiences (Barcelona, Spain)

Associate Chair for [CHI 2020](#), the 38th ACM Conference on Human Factors in Computing Systems (Honolulu, Hawaii, USA) (Engineering Interactive Systems Subcommittee)

Associate Chair for [MobileHCI 2019](#), the 20th ACM International Conference on Human-Computer Interaction with Mobile Devices and Services (Barcelona, Spain)

Full Papers Co-Chair for [EICS 2019](#), the 11th ACM SIGCHI Symposium on Engineering Interactive Computing Systems (Valencia, Spain) together with Víctor Manuel López Jaquero

Full Papers Co-Chair for [TVX 2019](#), the ACM International Conference on Interactive Experiences for TV and Online Video (Manchester, UK) together with Guy Schofield

Area Chair for Human-Centered Approaches for [RCIS 2019](#), the 13th IEEE International Conference on Research Challenges in Information Science (Brussels, Belgium)

Associate Chair for [CHI 2019](#), the 37th ACM Conference on Human Factors in Computing Systems (Glasgow, UK) (Interaction Techniques, Devices, and Modalities Subcommittee)

Associate Chair for [MobileHCI 2018](#), the 20th ACM International Conference on Human-Computer Interaction with Mobile Devices and Services (Barcelona, Spain)

Area Chair for Human-Computer Interaction for IFIP [ICEC 2018](#), the 17th International Conference on Entertainment Computing (Poznan, Poland)

Associate Chair for [TVX 2018](#), the ACM International Conference on Interactive Experiences for TV and Online Video (Seoul, South Korea)

Associate Chair for [CHI 2018](#), the 36th ACM Conference on Human Factors in Computing Systems (Montreal, Canada) (Interaction Techniques, Devices, and Modalities Subcommittee)

Associate Chair for [UIST 2016](#), the ACM User Interface Software and Technology Symposium

Associate Chair for [TVX 2016](#), the 3rd ACM International Conference on Interactive Experiences for TV and Online Video (Chicago, IL, USA)

Associate Chair for [TVX 2014](#), the 1st ACM International Conference on Interactive Experiences for TV and Online Video (New Castle, UK)

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 SIGCHI 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 2018](#), the 3rd ACM Int. Workshop on Multimedia Alternate Realities, at ACM Multimedia 2018

[AltMM 2017](#), the 2nd ACM Int. Workshop on Multimedia Alternate Realities, at ACM Multimedia 2017

[AltMM 2016](#), the 1st ACM Int. Workshop on Multimedia Alternate Realities, at ACM Multimedia 2016

[EICS 2017](#), the 9th ACM SIGCHI Symposium on Engineering Interactive Computing Systems

[IEEE AIVR 2018](#), the 1st IEEE International Conference on Artificial Intelligence and Virtual Reality

[INTETAIN 2016](#), the 8th Int. Conference on Intelligent Technologies for Interactive Entertainment

[INTETAIN 2015](#), the 7th Int. Conference on Intelligent Technologies for Interactive Entertainment

[INTETAIN 2014](#), the 6th Int. Conference on Intelligent Technologies for Interactive Entertainment

[INTETAIN 2013](#), the 5th Int. Conference on Intelligent Technologies for Interactive Entertainment

[ISAmI 2023](#), the 14th International Symposium on Ambient Intelligence

[ISAmI 2022](#), the 13th International Symposium on Ambient Intelligence

[ISAmI 2021](#), the 12th International Symposium on Ambient Intelligence

[ISAmI 2019](#), the 10th International Symposium on Ambient Intelligence

[ISAmI 2017](#), the 8th International Symposium on Ambient Intelligence

[ISAmI 2016](#), the 7th International Symposium on Ambient Intelligence

[ISAmI 2015](#), the 6th International Symposium on Ambient Intelligence

[ISAmI 2014](#), the 5th International Symposium on Ambient Intelligence

[ISAmI 2013](#), the 4th International Symposium on Ambient Intelligence

ISAmI 2012, the 3rd International Symposium on Ambient Intelligence
ISEA 2015, the 21st International Symposium on Electronic Art
ISEA 2022, the International Symposium on Electronic Art
ISEA 2023, the International Symposium on Electronic Art
IUI 2018, the 23rd ACM International Conference on Intelligent User Interfaces
IUI 2019, the 24th ACM International Conference on Intelligent User Interfaces
SAME 2012, the 5th Workshop on Semantic Ambient Media Experience
VSMM 2009, the 15th International Conference on Virtual Systems and Multimedia
WBI 2011, Whole Body Interaction in Games and Entertainment in conjunction with ACE 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
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
Interacting with Computers (Oxford Journals): 2016
International Journal of Human-Computer Studies (Elsevier): 2014-2023
International Journal of Human-Computer Interaction (Taylor & Francis): 2017-2020, 2022-2023
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 (AC),
2019 (AC), 2020 (AC), 2021 (AC), 2022 (AC), 2023 (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 (Editorial Board Member)

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

INTERACT, the IFIP TC13 Conference on Human-Computer Interaction: 2009, 2011, 2013, 2015, 2017

INTETAIN, the International 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)

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 (AC), 2019 (AC), 2021 (AC), 2022 (AC), 2023 (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

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)

VR, the IEEE Virtual Reality Conference: 2010

VRST, the ACM Symposium on Virtual Reality Software and Technology: 2019

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

OTHER PEER REVIEWING (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

Fonds de la Recherche Scientifique (FRS – FNRS), Belgium – FRIA Bourse: 2018

Fonds National de la Recherche (FNR), Luxembourg – CORE programme: 2021

H2020/Horizon-FETOPEN: 2020, 2021, 2022

National Research, Development, and Innovation Office, Hungary - International cooperation: 2021

Research Grants Council (RCG) of Hong Kong – Early Career Scheme: 2022, 2023
UEFISCDI, Romania: 2019