Lista de lucrări

a) Lista 10 lucrări relevante

1 **Laura-Bianca Bilius**, Ştefan-Gheorghe Pentiuc şi Radu-Daniel Vatavu (2023), „*TIGER: A Tucker-based instrument for gesture recognition with inertial sensors*", Pattern Recognition Letters, Volume 165, Pages 84-90, ISSN 0167-8655, **WOS: 000961171800007, IF(2021): 4.757, 5-YEAR IF(2021): 4.253, Q2 Quartile,** DOI: https://doi.org/10.1016/j.patrec.2022.11.028.

2 **Laura-Bianca Bilius**, Ovidiu-Ciprian Ungurean şi Radu-Daniel Vatavu. (2023). „*Understanding Wheelchair Users' Preferences for On-Body, In-Air, and On-Wheelchair Gestures*". In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23). Association for Computing Machinery, New York, NY, USA, Article 78, 1–16, **Conferinţă de rang A* în clasificarea CORE,** DOI: https://doi.org/10.1145/3544548.3580929, **HONORABLE MENTION AWARD.**

3 **Laura-Bianca Bilius**, Ovidiu-Ciprian Ungurean şi Radu-Daniel Vatavu (2023). „*An Expressivity-Complexity Tradeoff?: User-Defined Gestures from the Wheelchair Space are Mostly Deictic*". In Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (CHI EA '23). Association for Computing Machinery, New York, NY, USA, Article 35, 1–8, **Conferinţă de rang A* în clasificarea CORE,** DOI: https://doi.org/10.1145/3544549.3585695

4 **Laura-Bianca Bilius** şi 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*". In Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (CHI EA '23). Association for Computing Machinery, New York, NY, USA, Article 165, 1–8, **Conferinţă de rang A* în clasificarea CORE,** DOI: https://doi.org/10.1145/3544549.3585771

5 **Laura-Bianca Bilius** şi 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, **WOS:000590370400001, IF(2020): 4.277, 5-YEAR IF(2020): 4.134, Q2 Quartile,** DOI: https://doi.org/10.1080/15472450.2020.1846127.

6 **Laura-Bianca Bilius** şi Ştefan Gheorghe Pentiuc (2020). "*Efficient Unsupervised Classification of Hyperspectral Images Using Voronoi Diagrams and Strong Patterns*". Sensors 20, no. 19: 5684, **WOS:000587236000001, IF(2020): 3.576, 5-YEAR IF(2020): 3.735, Q1 Quartile,** DOI: https://doi.org/10.3390/s20195684.

7 **Laura-Bianca Bilius**, Radu-Daniel Vatavu şi Nicolai Marquardt (2021). „*Smart Vehicle Proxemics: A Conceptual Framework Operationalizing Proxemics in the Context of Outside-the-vehicle Interactions*", In: Ardito C. et al. (eds) Human-Computer Interaction– INTERACT 2021. Lecture Notes in Computer Science, vol 12933. Springer, Cham, **WOS:000697565900011, Conferinţă de rang ARC CORE B,** DOI: http://dx.doi.org/10.1007/978-3-030-85616-8_11.

8 Radu-Daniel Vatavu şi **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 (Virtual Event), USA: ACM, **Conferinţă de rang A* în clasificarea CORE,** DOI: https://doi.org/10.1145/3472749.3474780.

9 **Laura-Bianca Bilius** şi Radu-Daniel Vatavu (2021). „*Demonstration of GestuRING, a Web Tool for Ring Gesture Input*". The Adjunct Publication of UIST '21, the 34th Annual ACM Symposium on User Interface Software and Technology. ACM, New York, NY, USA, 2 pages, **Conferinţă de rang A* în clasificarea CORE,** DOI: https://doi.org/10.1145/3474349.3480199

10 Ovidiu-Andrei Schipor, **Laura-Bianca Bilius**, Ovidiu-Ciprian Ungurean, Alexandru-Ionuţ Şiean, Alexandru-Tudor Andrei şi Radu-Daniel Vatavu (2022). "*Personalized wearable interactions with WearSkill*", Prooceedings of the 19th International Web for All Conference (W4A '22). Association for Computing Machinery, New York, NY, USA, Article 8, 1–2, DOI: https://doi.org/10.1145/3493612.3520474, **ACCESSIBILITY CHALLENGE JUDGES' AWARD şi ACCESSIBILITY CHALLENGE DELEGATES' AWARD.**

b) Teza sau tezele de doctorat;
„Contribuţii în recunoaşterea formelor utilizând descompuneri tensoriale"
(en. „Contributions to Pattern Recognition using Tensor Decompositions"),
Conducător de doctorat prof. dr. ing. Ştefan-Gheorghe Pentiuc, domeniul Calculatoare şi Tehnologia Informaţiei, susţinută pe data de 08.06.2022.

c) Brevete de invenţie şi alte titluri de proprietate industrială;
–

d) Cărţi şi capitole în cărţi;
–

e) Articole/studii in extenso, publicate în reviste din fluxul ştiinţific internaţional principal;

1. **Laura-Bianca Bilius**, Ştefan-Gheorghe Pentiuc şi Radu-Daniel Vatavu **(2023)**, „*TIGER: A Tucker-based instrument for gesture recognition with inertial sensors*", Pattern Recognition Letters, Volume 165, Pages 84-90, ISSN 0167-8655, **WOS: 000961171800007, IF(2021): 4.757, 5-YEAR IF(2021): 4.253, Q2 Quartile**, DOI: https://doi.org/10.1016/j.patrec.2022.11.028.

2. **Laura-Bianca Bilius** şi Ştefan Gheorghe Pentiuc **(2020)**. "*Efficient Unsupervised Classification of Hyperspectral Images Using Voronoi Diagrams and Strong Patterns*". Sensors 20, no. 19: 5684, **WOS:000587236000001, IF(2020): 3.576, 5-YEAR IF(2020): 3.735, Q1 Quartile**, DOI: https://doi.org/10.3390/s20195684.

3. **Laura-Bianca Bilius** şi Ştefan Gheorghe Pentiuc **(2020)**. „*Unsupervised Clustering for Hyperspectral Images*". Symmetry 12, no. 2: 277, **WOS:000521147600138, IF(2020): 2.713, 5-YEAR IF(2020): 2.612, Q2 Quartile**, DOI: https://doi.org/10.3390/sym12020277.

4. **Laura-Bianca Bilius** şi 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, **WOS:000590370400001, IF(2020): 4.277, 5-YEAR IF(2020): 4.134, Q2 Quartile**, DOI: https://doi.org/10.1080/15472450.2020.1846127.

5. **Laura-Bianca Bilius**, Radu-Daniel Vatavu şi Nicolai Marquardt **(2021)**. „*Smart Vehicle Proxemics: A Conceptual Framework Operationalizing Proxemics in the Context of Outside-the-vehicle Interactions*", In: Ardito C. et al. (eds) Human-Computer Interaction– INTERACT 2021. Lecture Notes in Computer Science, vol 12933. Springer, Cham, **WOS:000697565900011, Conferinţă de rang ARC CORE B**, DOI: http://dx.doi.org/10.1007/978-3-030-85616-8_11.

6. **Laura-Bianca Bilius**, Radu-Daniel Vatavu şi Nicolai Marquardt **(2021)**. „*Exploring Application Opportunities for Smart Vehicles in the Continuous Interaction Space Inside and Outside the Vehicle*", In: Ardito C. et al. (eds) Human-Computer Interaction – INTERACT 2021. Lecture Notes in Computer Science, vol 12933. Springer, Cham, **WOS: 000697565900010, Conferinţă de rang ARC CORE B**, DOI: http://dx.doi.org/10.1007/978-3-030-85616-8_10.

7. **Laura-Bianca Bilius (2020)**. „*A Smartwatch-based User Interface for In-Vehicle Interactions*", 2020 International Conference on Development and Application Systems (DAS), Suceava, Romania, 2020, pp. 169-172, **WOS:000589776100031**, DOI: https://doi.org/10.1109/DAS49615.2020.9108911.

8. **Laura Bianca Bilius** şi Ştefan Gheorghe Pentiuc **(2020)**. „*Improving the Analysis of Hyperspectral Images Using Tensor Decomposition*", 2020 International Conference on Development and Application Systems (DAS), Suceava, Romania, pp. 173-176, **WOS:000589776100032**, DOI: https://doi.org/10.1109/DAS49615.2020.9108935.

9. **Laura Bianca Bilius**, Ştefan Gheorghe Pentiuc, David Brie şi Sebastian Miron **(2019)**. „*Analysis of Hyperspectral Images Using Supervised Learning Techniques*", 2019 23rd International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, 2019, pp. 675-680, **WOS:000590181100114**, DOI: https://doi.org/10.1109/ICSTCC.2019.8885627.

10. **Laura Bianca Bilius (2018)**. „*The User Behavior Analysis Based on Text Messages Using Parafac and Block Term Decomposition*". International Journal of Advanced Computer Science and Applications (IJACSA), 9 (10), 2018, **WOS:000454189600007**, DOI: http://dx.doi.org/10.14569/IJACSA.2018.091007.

11. Ovidiu-Andrei Schipor, **Laura-Bianca Bilius** şi Radu-Daniel Vatavu (**2022**). *"WearSkill: personalized and interchangeable input with wearables for users with motor impairments"*, Proceedings of the 19th International Web for All Conference (W4A '22). Association for Computing Machinery, New York, NY, USA, Article 10, 1–5; **WOS:000884352600014**. DOI: https://doi.org/10.1145/3493612.3520455.

12. Ovidiu-Andrei Schipor, **Laura-Bianca Bilius**, Ovidiu-Ciprian Ungurean, Alexandru Ionuţ Şiean, Alexandru-Tudor Andrei şi Radu-Daniel Vatavu (**2022**). *"Personalized wearable interactions with WearSkill"*, Prroceedings of the 19th International Web for All Conference (W4A '22). Association for Computing Machinery, New York, NY, USA, Article 8, 1–2, DOI: https://doi.org/10.1145/3493612.3520474; **WOS:000884352600025, ACCESSIBILITY CHALLENGE JUDGES'** şi **ACCESSIBILITY CHALLENGE DELEGATES' AWARDS.**

f) Publicaţii in extenso, apărute în lucrări ale principalelor conferinţe internaţionale de specialitate;

1. **Laura-Bianca Bilius**, Ovidiu-Ciprian Ungurean şi Radu-Daniel Vatavu (**2023**). *„An Expressivity-Complexity Tradeoff?: User-Defined Gestures from the Wheelchair Space are Mostly Deictic"*. In Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (CHI EA '23). Association for Computing Machinery, New York, NY, USA, Article 35, 1–8, **Conferinţă de rang A* în clasificarea CORE**, DOI: https://doi.org/10.1145/3544549.3585695.

2. **Laura-Bianca Bilius**, Ovidiu-Ciprian Ungurean şi Radu-Daniel Vatavu. (**2023**). *„Understanding Wheelchair Users' Preferences for On-Body, In-Air, and On-Wheelchair Gestures"*. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23). Association for Computing Machinery, New York, NY, USA, Article 78, 1–16, **Conferinţă de rang A* în clasificarea CORE**, DOI: https://doi.org/10.1145/3544548.3580929, **HONORABLE MENTION AWARD.**

3. **Laura-Bianca Bilius** şi 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*. In Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (CHI EA '23). Association for Computing Machinery, New York, NY, USA, Article 165, 1–8, **Conferinţă de rang A* în clasificarea CORE**, DOI: https://doi.org/10.1145/3544549.3585771.

4. Radu-Daniel Vatavu şi **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 (Virtual Event), USA: ACM, **Conferinţă de rang A* în clasificarea CORE**, DOI: https://doi.org/10.1145/3472749.3474780.

5. **Laura-Bianca Bilius** şi Radu-Daniel Vatavu (**2021**). *„Demonstration of GestuRING, a Web Tool for Ring Gesture Input"*. The Adjunct Publication of UIST '21, the 34th Annual ACM Symposium on User Interface Software and Technology. ACM, New York, NY, USA, 2 pages, **Conferinţă de rang A* în clasificarea CORE**, DOI: https://doi.org/10.1145/3474349.3480199.

6. Radu-Daniel Vatavu, Ovidiu-Ciprian Ungurean şi **Laura-Bianca Bilius** (**2022**). *"Interactive Public Displays and Wheelchair Users: Between Direct, Personal and Indirect, Assisted Interaction"*. In Proceedings of the 35th Annual ACM Symposium on User Interface Software and Technology (UIST '22). Association for Computing Machinery, New York, NY, USA, Article 45, 1–17, **Conferinţă de rang A* în clasificarea CORE**, DOI: https://doi.org/10.1145/3526113.3545662.

7. **Laura-Bianca Bilius** şi Radu-Daniel Vatavu (**2020**). *„A Synopsis of Input Modalities for In-Vehicle Infotainment and Consumption of Interactive Media"*. In ACM International Conference on Interactive Media Experiences (IMX '20). Association for Computing Machinery, NY, USA, 195–199, DOI: https://doi.org/10.1145/3391614.3399400.

8. **Laura-Bianca Bilius**, Radu-Daniel Vatavu şi Nicolai Marquardt (**2021**). *„Smart Vehicle Proxemics: A Conceptual Framework Operationalizing Proxemics in the Context of Outside-the-vehicle Interactions"*, In: Ardito C. et al. (eds) Human-Computer Interaction– INTERACT 2021. Lecture Notes in Computer Science, vol 12933. Springer, Cham, **WOS:000697565900011, Conferinţă de rang B în clasificarea CORE**, DOI: http://dx.doi.org/10.1007/978-3-030-85616-8_11.

9. **Laura-Bianca Bilius**, Radu-Daniel Vatavu şi Nicolai Marquardt **(2021)**. *„Exploring Application Opportunities for Smart Vehicles in the Continuous Interaction Space Inside and Outside the Vehicle"*, In: Ardito C. et al. (eds) Human-Computer Interaction – INTERACT 2021. Lecture Notes in Computer Science, vol 12933. Springer, Cham, **WOS: 000697565900010, Conferinţă de rang B în clasificarea CORE**, DOI: http://dx.doi.org/10.1007/978-3-030-85616-8_10.

10. **Laura-Bianca Bilius (2020)**. *„A Smartwatch-based User Interface for In-Vehicle Interactions"*, 2020 International Conference on Development and Application Systems (DAS), Suceava, Romania, 2020, pp. 169-172, **WOS:000589776100031**, DOI: https://doi.org/10.1109/DAS49615.2020.9108911.

11. **Laura Bianca Bilius** şi Ştefan Gheorghe Pentiuc **(2020)**. *„Improving the Analysis of Hyperspectral Images Using Tensor Decomposition"*, 2020 International Conference on Development and Application Systems (DAS), Suceava, Romania, pp. 173-176, **WOS:000589776100032**, DOI: https://doi.org/10.1109/DAS49615.2020.9108935.

12. **Laura Bianca Bilius**, Ştefan Gheorghe Pentiuc, David Brie şi Sebastian Miron **(2019)**. *„Analysis of Hyperspectral Images Using Supervised Learning Techniques"*, 2019 23rd International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, 2019, pp. 675-680, **WOS:000590181100114**, DOI: https://doi.org/10.1109/ICSTCC.2019.8885627.

13. **Laura Bianca Bilius** şi Ştefan Gheorghe Pentiuc , *"Tensor-Based and Projection-Based Methods for Dimensionality Reduction of Hyperspectral Images,"* **(2022)** International Conference on Development and Application Systems (DAS), 2022, pp. 167-170, DOI: https://doi.org/10.1109/DAS54948.2022.9786148.

14. Alexandru Ionut Şiean, **Laura Bianca Bilius** şi Radu-Daniel Vatavu, *„Assistive Technology in the Synchrony Between Ambient Intelligence and Mixed Reality for People with Motor Disabilities"*, **(2022)**, In: Novais, P., Carneiro, J., Chamoso, P. (eds) Ambient Intelligence – Software and Applications – 12th International Symposium on Ambient Intelligence. ISAmI 2021. Lecture Notes in Networks and Systems, vol 483. Springer, Cham. DOI: https://doi.org/10.1007/978-3-031-06894-2_3.

15. Ovidiu-Andrei Schipor, **Laura-Bianca Bilius** şi Radu-Daniel Vatavu **(2022)**. *"WearSkill: personalized and interchangeable input with wearables for users with motor impairments"*, Proceedings of the 19th International Web for All Conference (W4A '22). Association for Computing Machinery, New York, NY, USA, Article 10, 1–5; **WOS:000884352600014**. DOI: https://doi.org/10.1145/3493612.3520455.

16. Ovidiu-Andrei Schipor, **Laura-Bianca Bilius**, Ovidiu-Ciprian Ungurean, Alexandru Ionuţ Şiean, Alexandru-Tudor Andrei şi Radu-Daniel Vatavu **(2022)**. *"Personalized wearable interactions with WearSkill"*, Prroceedings of the 19th International Web for All Conference (W4A '22). Association for Computing Machinery, New York, NY, USA, Article 8, 1–2, DOI: https://doi.org/10.1145/3493612.3520474; **WOS:000884352600025, ACCESSIBILITY CHALLENGE JUDGES' AWARD** şi **ACCESSIBILITY CHALLENGE DELEGATES' AWARD**

g) Alte lucrări şi contribuţii ştiinţifice sau, după caz, din domeniul creaţiei artistice.

1. **Laura Bianca Bilius** şi Ştefan Gheorghe Pentiuc **(2020)**. *„Segmentation Method for Hyperspectral Images using Tensor Decomposition"*, Journal of applied computer science & mathematics, Issue 2, (Vol. 14), DOI: https://doi.org/10.4316/JACSM.202002001.

2. **Laura Bianca Bilius** şi Ştefan Gheorghe Pentiuc **(2018)**. *„Image Restoration using Voronoi Diagrams"*, Journal of applied computer science & mathematics, Issue 2, Vol. 12, DOI: https://doi.org/10.4316/JACSM.201802003.

3. Ştefan Gheorghe Pentiuc şi **Laura Bianca Bilius (2021)**. *„The Analysis of Students Opinion About the Teachers Skills using Supervised Learning"*, Journal of Social Sciences, Volume V, no. 1, 2022. DOI: https://doi.org/10.52326/jss.utm.2022.5(1).01.

4. Pentiuc Ştefan-Gheorghe, Bobric Elena Crenguţa şi **Bilius Laura-Bianca (2023)**, *„Analysis with Unsupervised Learning Based Techniques of Load Factor Profiles and Hyperspectral Images"*, Conferinţa "Electronics, Communications and Computing" Editia 12, Chişinău, Moldova, 20-21 octombrie 2022, Pag. 136-139, DOI: https://doi.org/10.52326/ic-ecco.2022/SEC.05.

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