Bardh Prenkaj

Curriculum Vitae

Content

Part I – Education

Type	**Date**	**Institution**	**Notes (Degree, Experience, …)**
Ph.D.	11/2018 – 10/2021 *(official graduation date: 25/02/2022)*	Sapienza University of Rome, Italy	PhD in Computer Science, defending the thesis "*Latent Deep Sequential Learning of Behavioural Sequences*", advisors prof. Velardi, prof. Distante; co-advisors: prof. Stilo, prof. Faralli.
Master's degree	01/2017 – 10/2018 *(official graduation date: 24/10/2018)*	Sapienza University of Rome, Italy	Laurea Magistrale in Computer Science. 110/110 *cum laude*
Bachelor's degree	09/2013 – 12/2016 *(official graduation date: 15/12/2016)*	Sapienza University of Rome, Italy	Laurea Triennale in Informatica. 110/110

Part II –Appointments

II.A – Research appointments

Start	End	Institution	Position	Activity description
01/06/2024	14/03/2026	Technical University of Munich	Visiting Researcher	I am currently working on fairness and trustworthiness of generative models as part of the Chair of Responsible Data Science. I currently co-advise 3 PhD students
01/10/2022	31/01/2026	Sapienza University of Rome	Postdoc Researcher (Art. 22 L. 240/2010)	Competition procedure: AR-B 03/2022 (01/10/2022 – 31/01/2025) + AR-A 08/2024 (01/02/2025 – 31/01/2026) I'm working on anomaly detection in various tasks such as video understanding (in collaboration with PINlab), and behavioral and health time series (in collaboration with prof. Velardi). I also worked in counterfactual explainability in graph classification tasks (in collaboration with AIIM) where I mentored Mario Alfonso Prado-Romero (Gran Sasso Science Institute) and highly contributed to the technological transfer of GRETEL.
01/12/2021	30/09/2022	Sapienza University of Rome	Senior Research Fellow	Competition procedure: BS-S 6/2021 Coordinated research and implementation of innovative deep learning models to predict events in patient behavioral time series
01/07/2017	31/10/2018	Sapienza University of Rome	Student Research Assistant	Competition procedure: BS-J 7/2017 I Extended the UCrawler framework to cope with crawling and scraping the content of research articles and citation graphs on DBLP and Semantic Scholar. During this period, I also completed my master's thesis.

II.B – Visiting researcher

Period	Institution	Position
01/06/2023 – 01/09/2023	Technical University of Munich, Germany	Visiting researcher, hosted by prof. Gjergji Kasneci, working on Graph Counterfactual Explainability (paper published at KDD'24 Main Conference Track)
01/04/2021 – 30/06/2021	George Mason University, College of Engineering and Computing, Fairfax (VA), USA	Visiting Ph.D. student, hosted by prof. Carlotta Domeniconi, working on Anomaly Detection (paper published at PAKDD'20 Main Conference Track)

Part III – Teaching experience

III.A - Courses

Academic Years	Institution	Course
2024/25	Technical University of Munich, Germany	AI in the Metaverse - Simulating Agents with LLMs (4 ECTS), *course open for students in M.Sc. in Computer Science & M.Sc. in Computer Engineering*
2024/25	Heimerer College, Kosovo	AI in Healthcare (5 ECTS), M.Sc. in Digital Healthcare, Faculty of Health Sciences and Nursing
2024/25	Heimerer College, Kosovo	Sensing and Diagnostic Technologies and Patient Monitoring (10 ECTS), M.Sc. in Digital Healthcare, Faculty of Health Sciences and Nursing
2023/24	Heimerer College, Kosovo	Bioinformatics (6 ECTS), M.Sc. in Digital Healthcare, Faculty of Health Sciences and Nursing
2022/23, 2023/24	Heimerer College, Kosovo	Bioinformatics (6 ECTS), M.Sc. in Medical Laboratory Sciences, Faculty of Health Sciences and Nursing
2023/24	Fondazione ITS – Istituto Tecnico Superiore Information and Communications Technology Academy, Italy	Fondamenti di Programmazione in Python (2x25 hours) Progetto: ”UNLIMITED TECHNOLOGICAL KNOWLEDGE” – Indirizzi PROFESSIONAL CLOUD DEVELOPER e FULL STACK DEVELOPER at S.M.I. Technologies and Consulting srl in Via della Sierra Nevada, 60, 00144, Rome, CUP: G84D23004110006
2023/24	Fondazione ITS – Istituto Tecnico Superiore Information and Communications Technology Academy, Italy	Sistemi Operativi e Reti (2x40h) Progetto: ”UNLIMITED TECHNOLOGICAL KNOWLEDGE” – Indirizzi PROFESSIONAL CLOUD DEVELOPER and FULL STACK DEVELOPER at S.M.I. Technologies and Consulting srl in Via della Sierra Nevada, 60, 00144, Rome, CUP: G84D23004110006
2022/23	Luiss Guido Carli, Italy	Algorithms (8 ECTS, Laboratory classes), B.Sc. in Management and Computer Science, Department of Business and Management. Main prof: Irene Finocchi
2022/23, 2023/24	Sapienza University of Rome, Italy	Machine Learning (6 ECTS, Laboratory classes), M.Sc. in Computer Science, Faculty of Information Engineering, Computer Science, and Statistics. Main prof: Paola Velardi
2018/19, 2019/20	Sapienza University of Rome, Italy	Web and Social Information Extraction (6 ECTS, Laboratory classes in co-teching with Giovanni Stilo), M.Sc. in Computer Science, Faculty of Information Engineering, Computer Science, and Statistics. Main prof: Paola Velardi
2018/19	Sapienza University of Rome, Italy	Social and Behavioural Networks (6 ECTS, Laboratory classes), M.Sc. in Data Science, Faculty of Information Engineering, Computer Science, and Statistics. Main prof: Giovanni Stilo

III.B – Invited Talks

Year	Institution	Lecture
2024	Temporal Graph Learning (TGL) Reading Group, University of Manheim	Unifying Evolution, Explanation, and Discernment: A Generative Approach for Dynamic Graph Counterfactuals

	(Germany) + Mila (Canada)	
2024	Microsoft Israel	Robust Stochastic Graph Generator for Counterfactual Explanations
2023	University of L'Aquila, Department of Information Engineering, Computer Science and Mathematics	Hands-on: Building Convolutional Neural Networks and Optimizing them to Recognize Handwritten Digits *for the students of the course [DT0683] Deep Neural Networks (M.Sc. level)*
2023	Technical University of Munich, PhD Program in Computer Science / Chair of Responsible Data Science	A Bridge between Anomaly Detection and Graph Counterfactual Explainability in Dynamic Data
2022	Martin-Luther University of Halle-Wittenberg, PhD Program in Digital Healthcare / Universitätsklinikum Halle (Saale)	Explaining Anomalies in Patient Daily Behavior Profiles

III.C – Tutorials

Date	**Venue**	**Title**
21/02/2024	38th Annual AAAI Conference on Artificial Intelligence (AAAI'24)	Graphs Counterfactual Explainability: A Comprehensive Landscape. Format: Quarter-day (1.5h) Tutorial
21/02/2024	38th Annual AAAI Conference on Artificial Intelligence (AAAI'24)	Digging into the Landscape of Graphs Counterfactual Explainability. Format: Quarter-day (1.5h) Lab Tutorial
19/10/2020	19th ACM International Conference On Information and Knowledge Management (CIKM'20)	Challenges and Solutions to the Student Dropout Prediction Problem in Online Courses. Format: Half-day (4h) Tutorial

IV.D – PhD Students

Graduation year	**Role**	**Student and Thesis title/topic**	**PhD Program / Institution**
2029	Mentor	*Yuxiao Li* Topic: Synthetic Data Generation Thesis: TBD	Computer Science, Technical University of Munich
2029	Mentor	*Zheyu Zhang* Topic: Synthetic Data Generation Thesis: TBD	Computer Science, Technical University of Munich
2026	Mentor	*Shuo Yang* Topic: Bias and Fairness in LLMs Thesis: TBD	Computer Science, Technical University of Munich
2025	Mentor	*Mario Alfonso Prado-Romero*, Topic: Graph Counterfactual Explainability	Computer Science, Gran Sasso Science Institute

		Thesis: *"Counterfactual Explainability in Graphs: Foundations, Generative Methods, and Ensemble Techniques"*	

IV.E – Advisor of Master and Bachelor final thesis

Graduation year	**Role**	**Student and thesis title/topic**	**Program / Institution**
2024	Co-Advisor	*Leonardo Berti*, Deep Learning for Limit Order Book Market: A Comprehensive Perspective	M.Sc. in Computer Science, Sapienza University of Rome
2022	Mentor	*Leonardo Berti*, Deep Learning for Trend Prediction in Financial Time Series	B.Sc. in Computer Science, Sapienza University of Rome
2021	Co-Advisor	*Dario Aragona*, Semi-supervised Anomaly Detection on Elderly Behaviour Time Serie	M.Sc. in Computer Science, Sapienza University of Rome
2021	Mentor	*Luca Podo*, Machine Learning applied to the Visual Analytics of health conditions in older people	M.Sc. in Computer Science, Sapienza University of Rome
2018	Mentor	*Gianmarco Forcella*, DataEX: A Distributed Micro Service Architecture to support Data Analytics in the eLearning sector	M.Sc. in Computer Science, Sapienza University of Rome
2018	Co-Advisor	*Emanuele Alessi*, Student Dropout Prediction through Attention Networks with an application to Unitelma Sapienza	M.Sc. in Computer Science, Sapienza University of Rome

Part V - Society memberships, Awards and Honors

Year	**Type**	**Title**
Since 2024	Membership	Member of the Association for Computing Machinery's Special Interest Group on Knowledge Discovery and Data Mining (SIGKDD)
Since 2023	Membership	Regular Member of the Association fort the Advancement of Artificial Intelligence (AAAI)
2023	Honor	Subject Expert: ("Cultore della Materia" Art. 42 del R.D. 04/06/1938, n.1269). Award for highly-skilled researcher and technician on "Machine Learning" course in M.Sc. Computer Science, Department of Information Engineering, Computer Science, and Statistics at the Sapienza University of Rome
2023	Honor	Subject Expert: ("Cultore della Materia" Art. 42 del R.D. 04/06/1938, n.1269). Award for highly-skilled researcher and technician on "Deep Neural Networks" course in M.Sc. Computer Science, Department of Information Engineering, Computer Science, and Mathematics at University of L'Aquila
2023	Award	Highlighted Reviewer at the NeurIPS XAI in Action (XAIA 2023) Workshop.
2020	Award	Winner of the Avvio alla Ricerca 2020 – Tipo I, prot. Num: AR120172A8B35EEA on the research project "Personalized e-Learning Solutions to Improve the Efficacy of Learning Outcomes in Computer Science e-Courses". Lump Sum: € 1,000.00

2017	Award	Winner of the Premio di Laurea distributed from LazioDiSU for completing the B.Sc. Computer Science, Ente per il Diritto agli Studi Universitari nel Lazio. num: 899, grade: 110/110. Lump Sum: € 2,599.18
2013-2018	Award	Winner of the LazioDiSU Study Scholarship for B.Sc. (3 years) and M.Sc. (2 years). Yearly sum: € 5,118.36

Part VI - Funding Information and research projects

- In the last five years (since 2018) I have been PI of 2 research project for a total funding of about € 110K
- Since 2018 I participated in 5 projects (including the 2 mentioned above) as researcher (component)

VI.A – As Principal Investigator

Years	**Title**	**Progam (and Partners)**	**Role**	**Grant Value (Tot. co-financed)**
2023-2025	@HOME: AI and IoT Solutions for HOme Care Monitoring of the Elderly	Riposizionamento Competitivo RSI Programma Regionale – FESR Lazio 2021-2027. CUP: F89J23001050007	Co-PI with prof. Paola Velardi (Sapienza)	€ 109.5K
2020-2021	Personalized e-Learning Solutions to improve the Efficacy of Learning Outcomes in Computer Science e-Courses	Avvio alla Ricerca 2020 - Tipo 1, protocol number AR120172A8B35EEA (sole participant)	Principal Investigator	€ 1K

VI.B – As WP leader, Task leader, or Research team member

Years	**Title**	**Progam (and Partners)**	**Role**	**Grant Value (Tot. co-financed)**
2022-ongoing	E-DAI: Digital Ecosystem for Integrated Analysis of Heterogeneous Health Data Relating to High-Impact Pathologies: An Innovative Model of Assistance and Research	Piano Operativo Salute (POS) 2014-2020. CUP: B83C22004150001	Research team member	€ 2.38M
2021-2023	SI4SI: Smart Intervention for Senior Isolation	AAL Programme (AAL Call 2020) https://www.aal-europe.eu/	Research team member	€ 1.75M
2020-2021	E-Linus	POR FESR Lazio 2014-2020, Avviso Pubblico "Emergenza Coronavirus e oltre	Research team member	€ 504K

Part VII – Research Activities

In what follow are summarized the research contributions provided in my career. Citations in the text refer to "Part X– Selected publications"

Keywords	**Brief Description**
Explainable AI (XAI)	XAI is vital for improving the transparency and interpretability of AI models, particularly in dynamic environments and graph-based structures. Key contributions in this field include the development of frameworks [WSDM23] and graph counterfactual explanaibility [KDD24,AAAI24,CSUR23] which aid in understanding and explaining AI decisions. **Activities and Collaborations:** During my first two years of postdoc (10/2022-06/2024), I collaborated with both national (AIIM of UnivAQ and KDDLab of UniPI) and international (RDS of TUM) research groups in XAI, specifically in graph counterfactual explainability. At RDS, I spent three months (06/2023-09/2023) as a visiting researcher working on dynamic graph explainability. We published [KDD24] as the first generative-based representation learning method for explainability purposes. I also collaborated with AIIM and KDDLab where I monitored a PhD student in establishing the foundations of graph counterfactual explainability (GCE) [CSUR23]. We developed the first unified and modular framework for GCE – namely GRETEL – published as a demo paper [WSDM23].
Anomaly Detection	Anomaly Detection plays a critical role in identifying outliers in data streams, essential in sectors such as healthcare and cybersecurity [ICCV23]. The contributions here include unsupervised detection methods based on dynamic clustering and trajectory analysis [CVPR23,AIM23], particularly useful for behavioral drift detection [TKDE23]. **Activities and Collaborations:** In the projects @HOME and E-Linus, we studied how to pinpoint anomalies in the daily routine of patients suffering from neurodegenerative diseases based on multivariate time series constituting of biomarker signals and daily activities. During the E-Linus project we published a technical paper in anomaly detection incorporating uncertainty measures by adopting learning models in hyperspaces [CVPR23], and a more medicine-focused [AIM23,CVPR23], and for @HOME we submitted (June 2024) a journal paper in JBHI (we're in the first revision round). We also extended these studies to a more generic drift detection framework – namely DynAmo – that tackles gradual changes in feature distribution and reports long-term anomalies instead of point ones [TKDE23]. During my Ph.D. (2018 – 2022), I studied the student dropout phenomenon [CSUR20, FGCS21] with a focus on detecting peculiarities for at-risk students and providing bespoke pathways to recuperate them. This was done in collaboration with prof. Distante at Unitelma Sapienza and the students enrolled therein.
Machine Learning for Healthcare	In healthcare, Machine Learning is leveraged to monitor patient behavior, detect anomalies, and predict health outcomes. My work includes developing models for social isolation disorders and behavioral time series analysis, contributing to early detection and intervention [AIM23,TKDE23].

Part VIII – Summary of Scientific Achievements

Product Type	Number	Database	Start	End
Papers [international]	27[1]	Google Scholar	2017	2025
Papers [international]	24	Scopus	2017	2025
Papers [international]	17	Web of Science (WoS)	2017	2025

	Databases		
	Scopus	**Web of Science**	**Google Scholar**
Total Impact Factor	55.188	55.188	55.188
Average Impact Factor	2.299	3.246	2.044
Total Citation	217	127	384
Average Citations per Product	9.04	7.47	14.22
Hirsch (H) index	7	6	8
Normalized H index (H index divided by academic seniority)	0.875	0.75	1
Field-Weighted Citation Impact (FWCI)	1.512	-	-

Part IX – Organization of conferences, keynotes, PC, peer review, paper presentation, conference participation

Type	Description
Conference Organization	[**DELTA24**] co-CHAIR of the Workshop Discovering Drift Phenomena in Evolving Landscapes (DELTA). The workshop is held in conjunction with ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2024), August 25, 2024, Barcelona, Spain. https://aiimlab.org/events/KDD_2024_Discovering_Drift_Phenomena_in_Evolving_Landscape.html [**DHSI24**] General Chair of the 4th International Summer School on Digitalization for Healthcare and Social Impact. The workshop is hosted by Heimerer College, May 27 – 31, 2024, Pristina, Kosovo
Journal Review	[**VLDB**] The International Journal on Very Large Data Bases, ISSN 1066-8888, Springer [**TKDD**] ACM Transactions on Knowledge Discovery from Data, ISSN 15564681, Association for Computing Machinery Press [**TIST**] ACM Transactions on Intelligent Systems and Technology, ISSN 21576904, 21576912, Association for Computing Machinery Press [**TKDE**] IEEE Transactions on Knowledge and Data Engineering, ISSN 10414347, IEEE Computer Society [**KAIS**] Knowledge and Information Systems, An International Journal, ISSN 02191377, 02193116, Springer London
Member of the Program	• European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases **(ECML-PKDD'25)**, September 15 – 19, 2025, Porto, Portugal.

[1] Without counting the workshop DELTA, the supplementary material for the ECCV'24 paper, and the arXiv.

Committee (PC)	• The 42nd International Conference on Machine Learning (**ICML'25)**, July 13 – 19, 2025, Vancouver, Canada • The 13th International Conference on Learning Representations **(ICLR'25)**, April 24 – 28, 2025, Singapore, Singapore • The 31st ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**KDD'25**), August 3 – 7, 2025, Toronto, Canada • The 18th European Conference on Computer Vision (**ECCV'24**), September 29 – October 4, 2024, Milan, Italy • The 33rd ACM International Conference on Information and Knowledge Management (**CIKM'24**), October 21 – 25, 2024, Bose, Idaho, USA • The 28th Pacific-Asia Conference on Knowledge Discover and Data Mining (**PAKDD'24**), May 7 – 10, 2024, Taipei, Taiwan • IEEE / CVF Computer Vision and Pattern Recognition Conference (**CVPR'24**), June 17 – 21, 2024, Seattle, WA, USA • The 38th Annual AAAI Conference on Artificial Intelligence (**AAAI'24**), February 20 – 27, 2024, Vancouver, Canada • SIAM International Conference on Data Mining (**SDM'24**), April 18-20, 2023, Houston, TX, USA • 26th European Conference on Artificial Intelligence (**ECAI'23**) September 30 – October 5, 2023, Krakow, Poland • 29th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (**KDD'23**), August 6 – 10, 2023, Long Beach, CA, USA • IEEE International Conference on Computer Vision (**ICCV'23**), October 2 – 6, 2023, Paris, France • IEEE / CVF Computer Vision and Pattern Recognition Conference (**CVPR'23**), June 18 – 22, 2023, Vancouver, Canada
Tertiary Reviewer (Not in the PC)	• SIAM International Conference on Data Mining (**SDM'23**), April 27 – 29, 2023, Minneapolis, MI, USA • 22nd IEEE International Conference on Data Mining (**ICDM'22**), November 28 – December 1, 2022, Orlando, FL, USA • 29th International Joint Conference on Artificial Intelligence, (**IJCAI'20**), January 7 – 15, 2021, Tokyo, Japan • 26th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (**KDD'20**), August 23 – 27, 2020, Virtual Conference • 19th IEEE International Conference on Data Mining, (**ICDM'19**), November 8 – 11, 2019, Beijing, China • European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, (**ECML-PKDD'19**), September 16 – 19, 2019, Würzburg, Germany. • 25th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (**KDD'19**), August 4 – 8, 2019, Anchorage, AK, USA
Conference Presentation	• *Unifying Evolution, Explanation, and Discernment: A Generative Approach for Dynamic Graph Counterfactuals*, 27/08/2024, The 30th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), Barcelona, Catalonia, Spain. • *Robust Stochastic Graph Generator for Counterfactual Explanations*, 25/02/2024, The 38th Annual AAAI Conference on Artificial Intelligence (AAAI), Vancouver, British Columbia, Canada. • *Multimodal Motion Conditioned Diffusion Model for Skeleton-based Video Anomaly Detection*, 04/10/2023, 2023 IEEE/CVF International Conference on Computer Vision (ICCV), Paris, France. • *Plotly.plus, an Improved Dataset for Visualization Recommendation*, 17-21/10/2022, 31st ACM International Conference on Information and Knowledge Management, Atlanta, Georgia, USA.

	• *CoRoNNa: a deep sequential framework to predict epidemic spread*, 22-26/03/2021, SAC'21: Proceedings of the 36th Annual ACM Symposium on Applied Computing, Seoul, South Korea. • *A reproducibility study of deep and surface machine learning methods for human-related trajectory prediction*. 20/10/2020, 29th ACM International Conference On Information and Knowledge Management, CIKM'20, Galway, Ireland. • *A smart peephole on the cloud*, 11-15/09/2017, 19th International Conference on Image Analysis and Processing, ICIAP'17, Catania, Italy
Conference Participation	• The 18th European Conference on Computer Vision (**ECCV'24**), September 29 – October 4, 2024, Milan, Italy • The 30th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**KDD'24**), August 25 – 29, 2024, Barcelona, Catalonia, Spain • 38th Annual AAAI Conference on Artificial Intelligence (**AAAI'24**), February 20 –27, 2024, Vancouver, British Columbia, Canada • 2023 IEEE/CVF International Conference on Computer Vision (ICCV), (**ICCV'23**), October 2 – 6, 2023, Paris, France • 31st ACM International Conference On Information and Knowledge Management, (**CIKM'22**), October 17 – 21, 2022, Atlanta, USA • 36th ACM/SIGAPP Symposium on Applied Computing, (**SAC'21**), March 22 – 26, 2021, Seoul, South Korea • 29th ACM International Conference On Information and Knowledge Management, (**CIKM'20**), October 19 – 23, 2020, Galway, Ireland • 19th International Conference on Image Analysis and Processing, (**ICIAP'19**), September 11 – 15, 2017, Catania, Italy

Part X – Selected Publications

I am reporting the citation number from Google Scholar. The IF / CORE are reported regarding to the publication year: e.g., [PAKDD21] is now a B grade conference; in 2021 it was A.

Nº.	**Autori, titolo e dati bibliografici**	**IF / CORE EDU**	**Nº. Cit.**
1	**B.Prenkaj**, M. Villaizan-Vallelado, T. Leemann, and G. Kasneci *Unifying Evolution, Explanation, and Discernment: A Generative Approach for Dynamic Graph Counterfactuals.* In Proceedings of the 30th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD'24), August, 25-29, 2024, Barcelona, Catalonia, Spain. DOI: 10.1145/3637528.3671831	A*	0
2	M.A. Prado-Romero*, **B. Prenkaj*** and G. Stilo. *Robust Stochastic Graph Generator for Counterfactual Explanations*. In Proceedings of the 38th Annual AAAI Conference on Artificial Intelligence (AAAI'24), February 20-27, 2024, Vancouver, British Columbia, Canada DOI: 10.1609/aaai.v38i19.30149	A*	3
3	M.A. Prado-Romero, **B.Prenkaj**, G.Stilo and F. Giannotti *A Survey on Graph Counterfactual Explanations: Definitions, Methods, Evaluation, and Research Challenges* ACM Computing Surveys (CSUR) 2023 DOI: 10.1145/3618105	10.282 (Q1)	43
4	A. Flaborea, L. Collorone, GMDA. Di Melendugno, S. D'Arrigo, **B.Prenkaj**, F.Galasso	A*	41

	Multimodal motion conditioned diffusion model for skeleton-based video anomaly detection. In Proceedings of the IEEE/CVF International Conference on Computer Vision 2023 (pp. 10318-10329).		
5	**B. Prenkaj**, D.Aragona, A. Flaborea, F. Galasso, S. Gravina, L. Podo, E. Reda, P. Velardi *A self-supervised algorithm to detect signs of social isolation in the elderly from daily activity sequences.* Artificial Intelligence In Medicine. 135 pp. 102454 (2023). DOI: 10.1016/j.artmed.2022.102454	7.011 (Q1)	17
6	**B. Prenkaj**, P. Velardi *Unsupervised Detection of Behavioural Drift with Dynamic Clustering and Trajectory Analysis.* IEEE Transactions on Knowledge and Data Engineering, 2023 DOI: 10.1109/TKDE.2023.3320184	8.9 (Q1)	6
7	A. Diko, D. Avola*, **B. Prenkaj***, F. Fontana, L. Cinque. Semantically Guided Representation Learning For Action Anticipation. In Proceedings of the 18th European Conference on Computer Vision (ECCV'24), September 29 - October 4, 2024, Milan, Italy. DOI: https://link.springer.com/chapter/10.1007/978-3-031-73390-1_26	A*	3
8	H. Sarvari, C. Domeniconi, **B. Prenkaj**, G. Stilo *Unsupervised boosting-based autoencoder ensembles for outlier detection* In Pacific-Asia Conference on Knowledge Discovery and Data Mining (pp. 91-103)	A	33
9	L.Podo, **B. Prenkaj**, P. Velardi *Agnostic Visual Recommendation Systems: Open Challenges and Future Directions.* IEEE Transactions on Visualization and Computer Graphics, 2024 DOI: 10.1109/TVCG.2024.3374571	4.7 (Q1)	7
10	**B. Prenkaj**, D. Distante, S. Faralli, P. Velardi *Hidden space deep sequential risk prediction on student trajectories.* Future Generation Computer Systems. 125 pp. 532-543 (2021) DOI: 10.1016/j.future.2021.07.002	7.307 (Q1)	20
11	**B. Prenkaj**, P. Velardi, G. Stilo, D. Distante, S. Faralli *A survey of machine learning approaches for student dropout prediction in online courses.* ACM Computing Surveys, 53, 3, Article 57 (June 2020), 34 pages DOI: 10.1145/3388792	10.282 (Q1)	126
12	M.A. Prado-Romero, **B. Prenkaj**, G. Stilo *Developing and evaluating graph counterfactual explanation with GRETEL* In Proceedings of the Sixteenth ACM International Conference on Web Search and Data Mining (WSDM'23). February 27 - March 3, 2023, Singapore, Singapore DOI: 10.1145/3539597.3573026	A*	9

Part XI – Complete list of international publications

Journals

1. L. Podo, B. Prenkaj, P. Velardi. Agnostic Visual Recommendation Systems: Open Challenges and Future Directions. IEEE Transactions on Visualization and Computer Graphics, 2024. DOI: 10.1109/TVCG.2024.3374571
2. B. Prenkaj, P. Velardi. Unsupervised Detection of Behavioural Drifts with Dynamic Clustering and Trajectory Analysis. IEEE Transactions on Knowledge and Data Engineering, 2023. DOI: 10.1109/TKDE.2023.3320184
3. M.A. Prado-Romero, B. Prenkaj, G. Stilo, F. Giannotti. A Survey on Graph Counterfactual Explanations: Definitions, Methods, Evaluation, and Research Challenges. ACM Computing Surveys (CSUR) 2023. DOI: 10.1145/3618105

4. B. Prenkaj, D. Aragona, A. Flaborea, F. Galasso, S. Gravina, L. Podo, E. Reda and P. Velardi. A self-supervised algorithm to detect signs of social isolation in the elderly from daily activity sequences. Artificial Intelligence In Medicine. 135 pp. 102454 (2023). DOI: 10.1016/j.artmed.2022.102454
5. B. Prenkaj, D. Distante, S. Faralli and P. Velardi. Hidden space deep sequential risk prediction on student trajectories. Future Generation Computer Systems. 125 pp. 532-543 (2021). DOI: 10.1016/j.future.2021.07.002
6. D. Aragona, L. Podo, B. Prenkaj and P. Velardi. Latent and sequential prediction of the novel coronavirus epidemiological spread. ACM SIGAPP Applied Computing Review. 21, 5-18 (2021). DOI: 10.1145/3493499.3493500
7. B. Prenkaj, P. Velardi, G. Stilo, D. Distante, and S. Faralli. A Survey of Machine Learning Approaches for Student Dropout Prediction in Online Courses. ACM Computing Surveys (CSUR), 53, 3, Article 57 (June 2020), 34 pages. DOI: 10.1145/3388792
8. A. Coletta, M. De Marsico, E. Panizzi, B. Prenkaj and D. Silvestri. MIMOSE: multimodal interaction for music orchestration sheet editors. Multimedia Tools And Applications. 78 pp. 33041-33068 (2019). DOI: 10.1007/s11042-019-07838-0
9. M. De Marsico, E. Nemmi, B. Prenkaj and G. Saturni. House in the (biometric) cloud: a possible application. IEEE Cloud Computing. 5, 58-69 (2018). DOI: 10.1109/MCC.2018.043221015

Conferences

10. S. Yang*, B. Prenkaj*, G. Kasneci. RAZOR: Sharpening Knowledge by Cutting Bias with Unsupervised Text Rewriting. In Proceedings of the 39th Annual AAAI Conference on Artificial Intelligence (AAAI'25), February 25- March 4, 2025, Philadelphia, Pennsylvania, USA. DOI: https://arxiv.org/abs/2412.07675
11. A. Diko, D. Avola*, B. Prenkaj*, F. Fontana, L. Cinque. Semantically Guided Representation Learning For Action Anticipation. In Proceedings of the 18th European Conference on Computer Vision (ECCV'24), September 29 - October 4, 2024, Milan, Italy. DOI: https://link.springer.com/chapter/10.1007/978-3-031-73390-1_26
12. Prado-Romero MA, Prenkaj B, Stilo G. GRETEL 2.0: Generation and Evaluation of Graph Counterfactual Explanations Evolved. InJoint European Conference on Machine Learning and Knowledge Discovery in Databases 2024 Aug 22 (pp. 363-367). Cham: Springer Nature Switzerland. DOI: https://link.springer.com/chapter/10.1007/978-3-031-70371-3_21
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