MINISTERIO
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AGENCIA
ESTATAL DE
INVESTIGACIÓN

CURRICULUM VITAE ABREVIADO (CVA)

Part A. PERSONAL INFORMATION

First name	Manuel		
Family name	Caeiro Rodríguez		
Gender (*)	Male	Birth date (dd/mm/yyyy)	05/03/1975
Social Security, Passport, ID number	35.465.501-F		
e-mail	mcaeiro@det.uvigo.es	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-2784-6060	

(*) Mandatory

A.1. Current position

Position	Profesor Titular de Universidad	
Initial date	6/9/2022	
Institution	Universidade de Vigo	
Department/Center	Telematic Engineering	AtlanTTic Research Center
Country	Spain	Teleph. number
Key words	Communication and Information Technologies, Computer Sciences, Technology-enhanced Learning	

A.2. Previous positions (research activity interuptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
2009-2022	Profesor Contratado Doctor/ Universidade de Vigo/Spain
2002-2009	Associated professor/University of Vigo/Spain
1999-2002	Project researcher/University of Vigo/Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD Communication Technologies	University of Vigo/Spain	2007
Telecommunication Engineering	University of Vigo/Spain	1999

Part B. CV SUMMARY

Manuel has a PhD in Telecommunications Engineering and has been working as Teacher at the University of Vigo since 2002. He has four six-year research periods (2000-2005, 2006-2011, 2012-2017, 2018-2023) and four five-year educational periods (2000-2006, 2006-2011, 2011-2016, 2006-2021). He has supervised 7 PhD thesis, 5 during the last 10 years. Now he is supervising two PhD thesis about learning technologies. He has the National Agency for Quality Assessment and Accreditation (ANECA) accreditation as full professor of Engineering and Architecture.

According to Google Scholar, he has an h-index of 25 and a total number of citations of 3.049. According to Scopus, his h-index is 18 and a total number of citations of 1.133. Manuel has 51 publications of articles in journals indexed in JCR and more than 200 publications in non-indexed journals, book chapters and conferences.

Regarding research, Manuel has acted as main or senior researcher in 46 research and technology innovation projects, both at European, national, and regional levels. At European level he has participated in the "innovative Technologies for an Engaging Classroom" (ITEC) project of the VII Framework Program (2010-2013) and in the project "Adopting Standards and Specifications for Educational Content" (ASPECT) of the eContentPlus Program (2008-2011),

working on the development of semantic recommendation systems and interoperability specifications. These projects were very important from the point of view of the adoption of learning technologies in secondary schools, considering not just the contents, but other educational resources to be involved and supported: experts, special events, trips, etc. As a result of these projects two papers were published in the journal Computer Standards and Interfaces (CSI) in 2014. Since 2014 he has also participated in eight projects of the Erasmus+ program, involving issues such as Design Thinking (DT), Self-Regulated Learning (SRL), software infrastructures for e-learning and the development of serious games. Currently, he is involved in four Erasmus+ projects about serious games and Virtual Reality (VR). Focusing on SRL, he has published several papers in JCR journals and 3 PhD thesis about monitoring of student activities and developing early warning systems.

Manuel has participated since 2004 in five research projects of the National R&D Plan, assuming the leadership of several modules. The last one was linked to a PhD thesis about the use of smartwatch wearables to obtain sleep and stress indicators. He has also participated in several projects financed by the Xunta de Galicia and the University of Vigo. Particularly, he was the Principal Investigator of the research network TELGalicia during the period 2012-2015. During this period, he organized more than 10 events regarding the promotion and adoption of learning technologies in pre-university education, focusing mainly on open educational resources.

Manuel has been in charge of the educational innovation project "Implementation of Self-regulation Strategies for Learning with the Help of ICT" (2013-2014) at the University of Vigo and has lectured two courses on this subject for university teacher training. He has also lectured one teacher training course on Open Educational Resources (OER) and participated as a teacher in the first IEEE Education Society MOOC on OER and in three courses on Design Thinking (DT) methodology for the development of project-based learning. He has also participated as a teacher in the mentoring program at the University of Vigo, training mentors in team working, leadership, social intelligence, and motivation.

Regarding technology transfer, he has participated in 20 contracts with companies and entities. He has been the principal investigator in five contracts with Gradiant R&D center about the development of learning analytics solutions (2013-2019) and one contract with the Galicia Sur Biomedical Foundation (2021-2022) about the development of a micro-learning platform based on the use of chatbots.

Manuel has been the Chair of the Spanish Chapter of the IEEE Education during the period 2018-2019 and the president of the Committee of the Laboral workers at the University of Vigo in Pontevedra during two periods (2018-2019 and 2021-2022). He performed research stays at the University of Coimbra (Portugal), University of Rennes (France), MTA Ztaki (Hungary), University of Kumamoto (Japan), University Linnaeus (Sweden), Polytechnique Institute of Porto (Portugal) and University of Minho (Portugal).

Manuel has been Associate Editor of the IEEE RITA (2015-2019), president of the Steering Committee for the IEEE RITA (2022-2024), and collaborates as a reviewer in several journals (IEEE Transactions on Learning Technologies, IEEE Access, etc.), and as a member of the programme committee with several conferences (FIE, EDUCON, ICALT, ECTEL, etc.).

Part C. RELEVANT MERITS

C.1. Publications

1. ElSayed, A.A., **Caeiro-Rodríguez, M.,** Mikic-Fonte, F.A. and Llamas-Nistal, M., 2021. A Novel Method to Measure Self-Regulated Learning Based on Social Media. IEEE Access, 9, pp.93516-93528. Q2

2. **Caeiro-Rodríguez, M.,** Otero-González, I., Mikic-Fonte, F.A. and Llamas-Nistal, M., 2021. A Systematic Review of Commercial Smart Gloves: Current Status and Applications. Sensors, 21(8), p.2667. Q2

3. Redondo, R.P.D**., Rodríguez, M.C.,** Escobar, J.J.L. and Vilas, A.F., 2021. Integrating micro-learning content in traditional e-learning platforms. Multimedia Tools and Applications, 80(2), pp.3121-3151. Q2

4. de Arriba-Pérez, F., Santos-Gago, J.M., **Caeiro-Rodríguez, M.** and Ramos-Merino, M., 2019. Study of stress detection and proposal of stress-related features using commercial-off-the-shelf wrist wearables. Journal of Ambient Intelligence and Humanized Computing, 10(12), pp.4925-4945. Q1

5. Manso-Vázquez, M., **Caeiro-Rodríguez, M.** and Llamas-Nistal, M., 2018. An xAPI application profile to monitor self-regulated learning strategies. IEEE Access, 6, pp.42467-42481. Q1

6. de Arriba-Pérez, F., **Caeiro-Rodríguez, M.,** Santos-Gago, J.M., 2016. Collection and processing of data from wrist wearable devices in heterogeneous and multple-user scenarios. Sensosrs, 16(9), p.1538. Q1

7. Anido-Rifón, L.E., Fernández-Iglesias, M.J., **Caeiro-Rodríguez, M.,** Santos-Gago, J.M., Llamas-Nistal, M., Sabucedo, L.Á. and Pérez, R.M., 2014. Standardization in computer-based education. Computer Standards & Interfaces, 36(3), pp.604-625. Q2

8. **Caeiro, M.,** Llamas, M. and Anido, L., 2014. PoEML: Modeling learning units through perspectives. Computer Standards & Interfaces, 36(2), pp.380-396. Q2

9. Figl, K., Derntl, M., **Rodriguez, M.C.** and Botturi, L., 2010. Cognitive effectiveness of visual instructional design languages. Journal of Visual Languages & Computing, 21(6), pp.359-373. Q2

10. González, J.F., **Rodríguez, M.C.,** Nistal, M.L. and Rifón, L.A., 2009. Reverse OAuth: A solution to achieve delegated authorizations in single sign-on e-learning systems. Computers & Security, 28(8), pp.843-856.

C.2. Congress (all of them are oral presentations given in person)

1. **Caeiro-Rodríguez, M.,** Manso-Vázquez, M., Llamas-Nistal, M., Fonte, F.A.M., Fernández-Iglesias, M.J., Tsalapata, H., Heidmann, O., Vaz-de-Carvalho, C., Jesmin, T., Terasmaa, J. and Tolstrup, L., 2021, September. A collaborative city-based game to support soft skills development in engineering and economics. In *2021 International Symposium on Computers in Education (SIIE)* (pp. 1-4). IEEE.

2. **Rodríguez, M.C.**, Nistal, M.L., Fonte, F.A.M., Penín, M.L. and Molina, M.M., 2018, April. Exploring the application of process mining to support self-regulated learning: An initial analysis with video lectures. In *2018 IEEE global engineering education conference (EDUCON)* (pp. 1766-1774). IEEE.

3. Perez-Rodriguez, R., Caeiro-**Rodriguez, M.** and Anido-Rifon, L., 2009, July. Enabling process-based collaboration in Moodle by using aspectual services. In *2009 Ninth IEEE International Conference on Advanced Learning Technologies* (pp. 301-302). IEEE.

4. **Caeiro, M.,** Nemeth, Z. and Priol, T., 2008, November. A Chemical Workflow Engine for scientific workflows with dynamicity support. In *2008 Third Workshop on Workflows in Support of Large-Scale Science* (pp. 1-10). IEEE.

5. **Caeiro-Rodríguez, M.**, Llamas-Nistal, M. and Anido-Rifón, L., 2006, October. A separation of concerns approach to educational modeling languages. In *Proceedings. Frontiers in Education. 36th Annual Conference* (pp. 9-14). IEEE.

6. **Caeiro-Rodríguez, M.,** Llamas-Nistal, M. and Anido-Rifón, L., 2005. Modeling group-based education: A proposal for a meta-model. In *Conceptual Modeling–ER 2005: 24th International Conference on Conceptual Modeling, Klagenfurt, Austria, October 24-28, 2005. Proceedings 24* (pp. 96-111). Springer Berlin Heidelberg.

7. **Caeiro, M.,** Anido, L. and Llamas, M., 2003. A critical analysis of IMS Learning Design. In *Designing for Change in Networked Learning Environments: Proceedings of the International Conference on Computer Support for Collaborative Learning 2003* (pp. 363-367). Springer Netherlands.

C.3. Research projects

1.-Title: "Digitising Academic Catalogues for Enhanced Mobility (DACEM)" 2023-1-ES01-KA2020-HED-000160344. Funding entity: Erasmus+. Duration: 30/12/2023- 31/07/2026. Principal Investigator: **Manuel Caeiro Rodríguez**. Number of researchers: 6. Grant amount: 79.240 €

2.- Title: "VRXanny: Virtual reality for anxiety and mental stress reduction in university students" 2021-1-PL01-KA220-HED-000027549. Funding entity: Erasmus+. Duration: 01/11/2021- 01/11/2023. Principal Investigator: Íñigo Cuiñas Gómez Number of researchers: 9. Grant amount: 82.261 €

3.- Title: "Services and applications for healthy aging" PID2020-115137RB-I00 Funding entity: Ministerio de Ciencia e Innovación. Duration: 01/10/2021 - 30/09/2024. Principal Investigator: Luis Anido Rifón, Luis Modesto Álvarez Sabucedo. Number of researchers: 10. Grant amount: 97.718 €

4.- Title: "Lean and agile practices linking engineering and higher education to industry" 2016 - 1 - EL01 - KA203 – 023624. Funding entity: Erasmus+. Duration: 01/9/2016 - 31/08/2028. Principal Investigator: **Manuel Caeiro Rodríguez.** Number of researchers: 7. Grant amount: 35.232 €

5.- Title: "Service platform based on multimodal analytics for self-regulated learning" TIN2016-80515-R. Funding entity: Ministerio de Economía y Competitividad. Duration: 01/10/2016 - 30/09/2020. Principal Investigator: Juan Manuel Santos Gago, Manuel José Fernández Iglesias. Number of researchers: 8. Grant amount: 58.200 €

6.- Title: "TELGalicia: Technology-Enhanced Learning Galicia" CN 2012/259 and R2014/029. Funding entity: Xunta de Galicia. Duration: 01/06/2012 - 30/112015. Principal Investigator: **Manuel Caeiro Rodríguez**. Number of researchers: 8. Grant amount: 240.000 €

7.- Title: "ITEC: Innovative Technologies for an Engaging Classroom". Grant Number: 257566 European Commission. 01/09/2010 – 31/08/2013. Principal Investigator: Luis Anido Rifón. Number of researchers: 6. Grant amount: 452.696 €

C.4. Contracts, technological or transfer merits

1.- Title: "Evaluation of a microlearning training strategy to improve therapeutic adherence in patients with inflammatory bowel disease". Funding entity: Galicia Sur Biomedical Soundation. Duration: 17/3/2021-13/03/2022. Principal Investigator: **Manuel Caeiro Rodríguez**, Rebeca Pilar Díaz Redondo. Contract amout: 31.000 €

2.- Title: "Enabling technologies for use in training Experiences". Funding entity: Gradiant R&D Center. Duration: 15/10/2019-15/04/2021. Principal Investigator: **Manuel Caeiro Rodríguez.** Contract amout: 14.400 €

3.- Title: "El desarrollo de la Educación Continua (lifelong-learning) en el ámbito escolar y corporativo". Funding entity: Gradiant R&D Center. Duration: 17/10/2017-15/04/2018. Principal Investigator: **Manuel Caeiro Rodríguez.** Contract amout: 12.000 €

4.- Title: "Learning analytics, learning adaptability and gamification". Funding entity: Gradiant R&D Center. Duration: 01/09/2016- 28/02/2017. Principal Investigator: **Manuel Caeiro Rodríguez**, Juan Manuel Santos Gago. Contract amout: 11.100 €

5.- Title: "Learning analytics state of the art study". Funding entity: Gradiant R&D Center. Duration: 01/11/2015- 08/04/2016. Principal Investigator: **Manuel Caeiro Rodríguez**, Juan Manuel Santos Gago. Contract amout: 8.900 €

6.- Title: "Analytics and semantic adaptation techniques for cloud learning environments". Funding entity: Gradiant R&D Center. Duration: 01/11/2013-31/12/2014. Principal Investigator: **Manuel Caeiro Rodríguez**, Juan Manuel Santos Gago. Contract amout: 151.800 €

7.- Title: "Development of an electronic learning platform". Funding entity: Galician Education Department. Duration: 01/07/2003-31/12-2004". Principal Investigators: Luis Anido Rifón and Martín Llamas Nistal. Contract amount: 200.000 €.