

CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	Jesús		
Family name	Mayor Márquez		
Gender (*)	Male	Birth date (dd/mm/yyyy)	16/05/1990
Social Security, Passport, ID number	281310716274	PAO075869	51475928L
e-mail	jesus.mayor@upm.es		URL Web
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-0682-070X		

(*) Mandatory

A.1. Current position

Position	Profesor Permanente Laboral		
Initial date	06/02/2024		
Institution	Universidad Politécnica de Madrid		
Department/Center	Sistemas Informáticos	Escuela Técnica Superior de Ingeniería de Sistemas Informáticos	
Country	Spain	Teleph. number	+3491673721
Key words	Virtual Reality, Computer Graphics, Artificial Intelligence.		

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

Period	Position/Institution/Country/Interruption cause
2016 - 2019	Centro Universitario de Tecnología y Arte Digital
2016 - 2016	Future Lighthouse
2014 - 2016	Desarrollo de aplicaciones informáticas
2013 - 2014	Universidad de Alcalá
2013 - 2013	META4 Spain S.A.
2008 - 2011	Informática El Corte Ingles: INETUM

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Tecnologías de la Información y las Comunicaciones	Universidad Rey Juan Carlos	2020
Máster Universitario en Computación Gráfica y Simulación	Universidad Camilo José Cela	2014
Ingeniero en Informática	Universidad San Pablo CEU	2013
Ingeniero Técnico en Informática de Sistemas	Universidad San Pablo CEU	2011

(Include all the necessary rows)

Part B. CV SUMMARY (max. 5000 characters, including spaces)

Jesús Mayor is a full-time researcher and teacher at the Universidad Politécnica de Madrid. He holds a Doctorate from the University of Rey Juan Carlos in the Doctoral Program in Information Technology and Communications (since September 2020). This Ph.D. was awarded cum laude and was honored with a special doctoral award. Jesús also holds a Master's degree in Computer Graphics and Simulation (Universidad Camilo José Cela - 2014),



and two degrees in Computer Engineering (Universidad CEU San Pablo - 2013) and Technical Engineering in Computer Systems (Universidad CEU San Pablo - 2011). Jesús has extensive research and university experience, having been hired at universities such as Alcalá University or Camilo José Cela University.

His research focus has centered on computational graphics by applying deep learning technologies for its improvement. In addition, it also follows lines that relate virtual reality as a learning media. The author has also established significant collaborations with researchers from various academic institutions. These academic relationships have been forged through different relations over time, such as the Universidad Rey Juan Carlos or Universidad Camilo José Cela. In addition, he has relations with external universities thanks to several international stays, such as the University of Tokyo (Japan) and the University of Tongji (China). These experiences have added great value to his research perspective, bringing additional dimensions to his scientific work and playing a significant role in promoting the internationalization of his scientific contributions.

Although his profile is focused on computer graphics, throughout this research journey, he has acquired extensive experience in handling large databases and applying various advanced statistical techniques. This has led him to produce several publications in the field of deep learning. He has published a total of 11 articles in journals indexed in the Journal Citation Reports (JCR), with the majority in quartile 1 (Q1) journals. He also published 8 conference articles and 1 invited conference in an international symposium. He also possesses a strong scientific and technological background, with notable participation in different national and international projects during his career.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions)

1. J. Mayor (AC); L.Raya; A. Sánchez. 2019. A comparative study of virtual reality methods of interaction and locomotion based on presence, cybersickness and usability. Transactions on Emerging Topics in Computing. IEEE. 9-3, pp.1542-1553. ISSN 2168-6750.
2. Aldo Gordillo; Daniel López-Fernández; Jesús Mayor. 2024. Examining and Comparing the Effectiveness of Virtual Reality Serious Games and LEGO Serious Play for Learning Scrum. Applied Sciences. 14-2. ISSN 2076-3417.
3. Jesús Mayor (AC); Pablo Calleja; Félix Fuentes-Hurtado. 2023. Long-short term memory prediction of user's locomotion in Virtual Reality. Virtual Reality. Springer Nature (Accepted, not currently published). 43-2, pp.32-42.
4. Daniel López-Fernández; Jesus Mayor; Marta García-Pérez; Aldo Gordillo. 2023. Are virtual reality serious video games more effective than web video games?. Computer Graphics and Applications. IEEE. 43-2, pp.32-42.
5. Daniel López-Fernández; Jesus Mayor; Jennifer Pérez; Aldo Gordillo. 2022. Learning and Motivational Impact of Using a Virtual Reality Serious Video Game to Learn Scrum. Transactions on Games. IEEE. pp.1-10.
6. R.Menendez-Ferreira; J.Torregrosa; D.López-Fernández; J.Mayor. 2021. Design of a serious games to improve resilience skills in youngsters. Entertainment Computing. Elsevier. 40. ISSN 1875-9521.
7. J.Mayor (AC); D.López-Fernández. 2021. Scrum VR: Virtual Reality Serious Video Game to Learn Scrum. Applied Sciences-Basel. MDPI. 11-19. ISSN 2076-3417.
8. L. Raya; J. J. Garcia-Rueda; D. López-Fernandez; J. Mayor. 2021. Virtual Reality Application for Fostering Interest in Art. Computer Graphics and Applications. IEEE. 41-2, pp.106-113.
9. J. Mayor (AC); L. Raya; S. Bayona; A. Sanchez. 2021. Multi-technique Redirected Walking Method. Transactions on Emerging Topics in Computing. IEEE. 10-2, pp.997-1008.
10. F. Ortega; J. Mayor; D. López-Fernández; R. Lara-Cabrera. 2020. CF4J 2.0: Adapting Collaborative Filtering for Java to new challenges of collaborative filtering based recommender systems. Knowledge-based Systems. Elsevier. 215. ISSN 0950-7051.



11. L. Raya; D. Rojo; (3/4) J. Mayor (AC); J. García-Rueda. 2019. A Virtual Reality Training Application for Adults With Asperger's Syndrome. Computer Graphics and Applications. IEEE. 39-2, pp.104-111.

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

1. Gordillo, Aldo; López-Fernández, Daniel; Tovar, Edmundo; Mayor, Jesus. A Comparison of the Usefulness of Game-Based Learning and Video-Based Learning for Teaching Software Engineering in Online Environments. Frontiers in Education Conference (FIE). IEEE. 2023. Estados Unidos de América.
2. Soler-Montellano, Agatángelo; García-Carbonero, Marta; Mayor, Jesús; Esteban-Maluenda, Ana. AppQuitectura: initial results and next challenges. X Jornadas sobre innovación docente en arquitectura. Universitat Politècnica de Catalunya. 2022. España.
3. Agatángelo Soler Montellano; Ana Esteban Maluenda; Íñigo Cobeta Gutiérrez; José Antonio Flores Soto; Marta García Carbonero; Jesús Mayor Márquez; Laura Sánchez Carrasco; Sara Gutiérrez Antón. El proceso de diseño de 'AppQUITECTURA', una aplicación digital para la investigación y la docencia en el área de Composición Arquitectónica. IV Encuentro de Áreas de Conocimiento de Composición Arquitectónica. Universidad de Sevilla. 2022. España.
4. J.Mayor; D.López-Fernández; P.P Alarcón. ScrumVR: Un video juego educativo en Realidad Virtual para aprender metodologías ágiles de desarrollo de software. 6º Congreso Virtual Internacional de Educación, Innovación y TIC, EDUNOVATIC. REDINE con la colaboración de MAT Institute. 2021. España.
5. F. Ortega; J. Mayor; R. Lara-Cabrera; D. López-Fernández. Entornos parcialmente no euclidianos en realidad virtual. VI Congreso de la Sociedad Española para las Ciencias del Videojuego. Universidad Complutense de Madrid. 2020. España.
6. P. Valdiviezo-Díaz; F. Ortega; J. Mayor; F. Pajuelo-Holguera. Optimización del filtrado colaborativo basado en factorización matricial mediante la relevancia de las preferencias de los usuarios. International Conference on Information Technology & Systems. Universidad Distrital Francisco José Caldas. 2020. Colombia.
7. J. Mayor; A. Sánchez; L. Raya. Empathy in virtual reality: Use of emotions to Foster presence. I Conferencia Internacional de Videojuegos y Publicidad: Comunicación y Persuasión. Universidade de Vigo. 2018. España.
8. J. Mayor; L. Raya; A. Sánchez. Study of the influence of user characteristics on the virtual reality presence. Congreso Español de Informática Gráfica. Universidad Rey Juan Carlos. 2018. España.
9. J. Mayor. Realidad Virtual y Realidad Aumentada (Ponencia invitada). VI Congreso Internacional de Investigadores Audiovisuales. Universidad Camilo José Cela. 2017. España.

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

1. Strengthening European Youngsters Resilience through Serious Games (Youngres). (Universidad Politécnica de Madrid). 01/04/2020-30/12/2021.
2. Lancelot - Tratamiento de Fobias mediante RV y Biofeedback. Orange: Soluciones Tecnológicas Aplicadas al Autismo. Laura Raya González. (Centro Universitario de Tecnología y Arte Digital). 01/04/2018-05/04/2019.
3. CicerOn: Virtual Speech Coach. Universia; Indra. Laura Raya González. (Centro Universitario de Tecnología y Arte Digital). 03/10/2016-05/04/2019.
4. Organic.Lingua. Competitiveness and Innovation Framework programme. Salvador Sánchez Alonso. (Universidad de Alcalá). 15/10/2013-28/02/2014.
5. eMadrid. Edmundo Tovar Caro. (Universidad Politécnica de Madrid). Desde 01/01/2022.

C.4. Contracts, technological or transfer merits, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information, if any