**Patricia Acosta-Vargas**

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## Resumen

**Patricia es estudiante de doctorado en la Universidad de Alicante. Actualmente es Investigadora Certificada por el SENESCYT, Colabora como revisora de artículos científicos para diversas revistas y congresos. Es miembro del grupo de investigación “Intelligent & Interactive Systems” de la Universidad de las Américas. Patricia obtuvo en el 2016 el “Premio al mejor artículo científico en Ciencias de la Computación” del XI Congreso de Ciencia y Tecnología. Es autora de más de 20 artículos indexados en Scopus y WOS. Es docente universitaria y facilitadora de cursos de actualización continua en el área de tecnología e investigación.**

## Educación

Sep 2015-Actual PhD (s) en Informática en la Universidad de Alicante, España

Feb 2013 Master Degree in Distance Education (E-Learning), Caribbean International University, Willemstad

Julio 2008 Magíster en Docencia En Instituciones De Educación Superior, Escuela Politécnica Nacional, Quito.

Mayo 1997 Ingeniera de Sistemas de Computación e Informática, Escuela Politécnica Nacional, Quito, Ecuador.

## Experiencia en investigación

2018/2020: Un framework como herramienta de apoyo para mejorar las habilidades socio-cognitivas en el marco de una inclusión plena para personas con discapacidad intelectual, independientemente del lugar de residencia. INÉDITA (Colaboradora en el área de accesibilidad web)

2018/2019: Plataforma de Telerehabilitación, INÉDITA (Colaboradora en el área de accesibilidad web)

2018/2019: Métricas y heurísticas de accesibilidad web: caso de estudio universidades de Latinoamérica, Universidad de Las Américas.

2018/2019 Estimación Robusta de Contaminación Urbana, REDCEDIA, CEPRA XII-2018- (Colaboradora en Evaluaciones de accesibilidad web con las WCAG 2.0)

2017/2018: Evaluación de la calidad de los sitios web de las universidades de Latinoamérica, Universidad de Las Américas. (Directora del proyecto)

2017/2018: Sistema de tele-rehabilitación para la auto-reeducación

## Publicaciones

2019 Acosta-Vargas P., Salvador-Ullauri L., Pérez-Medina J.L., Gonzalez M., Jimenes K., Rybarczyk Y. “Improving Web Accessibility: Evaluation and Analysis of a Telerehabilitation Platform for Hip Arthroplasty Patients”, (to be published) in Advances in Human Factors and System Interactions, Proc. Conf on Human Factors and System Interactions, July 24-28, 2019, Washington (USA) Serie Advances in Intelligent Systems and Computing. Springer 2019.

2019 Acosta-Vargas P., Salvador-Ullauri L., Pérez-Medina J.L., Zalakeviciute R., Hernandez W. “Heuristic Method of Evaluating Accessibility of Mobile Applications for Air Quality Monitoring”, (to be published) in Advances in Human Factors and System Interactions, Proc. Conf on Human Factors and System Interactions, July 24-28, 2019, Washington (USA) Serie Advances in Intelligent Systems and Computing. Springer 2019.

2019 Zalakeviciute R., Alexandrino K., Acosta-Vargas P., Pérez-Medina J.L., Hernandez W. “Evaluation of Smart Phone Open Source Applications for Air Pollution”, (to be published) in Advances in Human Factors and System Interactions, Proc. Conf on Human Factors and System Interactions, July 24-28, 2019, Washington (USA) Serie Advances in Intelligent Systems and Computing. Springer 2019.

2019 Pérez-Medina J.L., Jimenes-Vargas K.B., Acosta-Vargas P., Rybarczyk Y., González M.“User Experience Assessment of a Tele-rehabilitation Platform: The Physiotherapist Perspective”, (to be published) in Advances in Human Factors and System Interactions, Proc. Conf on Human Factors and System Interactions, July 24-28, 2019, Washington (USA) Serie Advances in Intelligent Systems and Computing. Springer 2019.

2019 Calle-Jimenez T., Tutillo-Sanchez D., Sanchez-Gordon S., Jadán-Guerrero J., Guevara C., Lara-Alvarez >P., Acosta-Vargas P., Salvador-Ullauri L., Nunes I. “Improving Usability with Think Aloud and Focus Group Methods. A Case Study: An Intelligent Police Patrolling System (I-Pat)”, (to be published) in Advances in Human Factors and System Interactions, Proc. Conf on Human Factors and System Interactions, July 24-28, 2019, Washington (USA) Serie Advances in Intelligent Systems and Computing. Springer 2019.

2019 Sanchez-Gordon S., Lara-Alvarez P., Jadán-Guerrero J., Guevara C., Salvador-Ullauri L., Calle-Jimenez T., Acosta-Vargas P. , “Implementation of controls for insertion of accessible images in open online editors based on WCAG guidelines. Case studies: TinyMCE and Summernote “, (to be published) in Advances in Human Factors and System Interactions, Proc. Conf on Human Factors and System Interactions, July 24-28, 2019, Washington (USA) Serie Advances in Intelligent Systems and Computing. Springer 2019.

2019 Lara-Alvarez P., Jadán-Guerrero J., Guevara C., Salvador-Ullauri L., Sanchez-Gordon S., Calle-Jimenez T., Acosta-Vargas P., Illescas W. “Application to Guide People with Visual Disability on Internal Buildings, using Beacon Bluetooth Positioning Systems”., (to be published) in Advances in Human Factors and System Interactions, Proc. Conf on Human Factors and System Interactions, July 24-28, 2019, Washington (USA) Serie Advances in Intelligent Systems and Computing. Springer 2019.

2019 Salvador-Ullauri L., Acosta-Vargas P., Jadán-Guerrero J., Guevara C., Sanchez-Gordon S., Calle-Jimenez T., Lara-Alvarez P. “Development of an Accessible Video Game to Improve the Understanding of the Test of Honey-Alonso”, (to be published) in Advances in Human Factors and System Interactions, Proc. Conf on Human Factors and System Interactions, July 24-28, 2019, Washington (USA) Serie Advances in Intelligent Systems and Computing. Springer 2019.

2019 Jadán-Guerrero J., Guevara C., Lara-Alvarez P., Sanchez-Gordon S., Calle-Jimenez T., Salvador-Ullauri L., Acosta-Vargas P., Bonilla-Jurado D.”Buildying Hybrid Interfaces to Increase Interaction with Young Children and Children with Special Needs”, (to be published) in Advances in Human Factors and System Interactions, Proc. Conf on Human Factors and System Interactions, July 24-28, 2019, Washington (USA) Serie Advances in Intelligent Systems and Computing. Springer 2019.

2019 Guevara C., Jadán-Guerrero J., Bonilla-Jurado D., Salvador-Ullauri L., Acosta-Vargas P., Calle-jimenez T, Lara-Alvarez P. “Fuzzy model for back posture correction during the walk”, (to be published) in Advances in Human Factors and System Interactions, Proc. Conf on Human Factors and System Interactions, July 24-28, 2019, Washington (USA) Serie Advances in Intelligent Systems and Computing. Springer 2019.

2019 Acosta-Vargas, P., Jadán-Guerrero, J., Guevara, C., Sanchez-Gordon, S., Calle-Jimenez, T.: Technical Contributions to the Quality of Telerehabilitation Platforms: Case Study—ePHoRt Project. In: Assistive & Rehabilitation Engineering. pp. 1–22. IntechOpen (2019)

2019 Pérez Medina,J., González,M., Pilco, H., Jimenes, K., Acosta-Vargas, P. , Sanchez-Gordon, S., Calle-Jimenez, T., Esparza, D., Rybarczyk, Y., “Usability Study of a Web-Based Platform for Home Motor Rehabilitation” IEEE Access, 2019, Volume: 7, Page s: 7932 – 7947

2019 Acosta-Vargas, P., Zalakeviciute R., Luján-Mora, S., Hernandez W., “Accessibility Evaluation of Mobile Applications for Monitoring Air Quality “, ICITS 2019, Ecuador.

2019 Rybarczyk, Y., Leconte, L., Pérez Medina, J., Jimenes, K., Acosta-Vargas, P., and Esparza D. “Telerehabilitation platform for post-arthroplasty recovery: a Dynamic Time Warping approach.” 3rd IEEE ETCM, Ecuador 2018.

2019 Acosta-Vargas, P., Rybarczyk, Y., Pérez Medina, J., González, M., Jimenes, K., Leconte, L., and Esparza D. “Towards Web accessibility in telerehabilitation platforms.” 3rd IEEE ETCM, Ecuador 2018.

2019 Guevara C, Jadán J, Rybarczyk Y, Acosta-Vargas P., Esparza W, Gonzalez M, Villareal S, Sanchez-Gordon S, Calle-Jimenez T, Nunes IL A real-time algorithm for movement assessment using fuzzy logic of hip arthroplasty patients, in Advances in Human Factors and System Interactions, Nunes IL (ed) (Proc. Conf on Human Factors and System Interactions, July 22-26, 2018, Orlando, Florida, USA) Vol. 781. Serie Advances in Intelligent Systems and Computing 781, https://doi.org/10.1007/978-3-319-94334-3\_27 Springer. 2019. https://link.springer.com/chapter/10.1007/978-3-319-94334-3\_27

2019 Pilco H, Sanchez-Gordon S, Calle-Jimenez T, Rybarczyk Y, Jadán J, Villareal S, Esparza W, Acosta-Vargas P., Guevara C, Nunes IL (to be published) Analysis and Improvement of the Usability of a Tele-Rehabilitation Platform for Hip Surgery Patients, in Advances in Human Factors and System Interactions, Nunes IL (ed) (Proc. Conf on Human Factors and System Interactions, July 22-26, 2018, Orlando, Florida, USA) Vol. 781. Serie Advances in Intelligent Systems and Computing 781, https://doi.org/10.1007/978-3-319-94334-3\_27 Springer. 2019. https://link.springer.com/chapter/10.1007/978-3-319-94334-3\_21

2019 Acosta-Vargas P., Esparza W, Rybarczyk Y, Gonzalez M, Villareal S, Jadán J, Guevara C, Sanchez-Gordon S, Calle-Jimenez T, Baldeon J, Nunes IL (to be published) Educational Resources Accessible on the Tele-rehabilitation Platform, in Advances in Human Factors and System Interactions, Nunes IL (ed) (Proc. Conf on Human Factors and System Interactions, July 22-26, 2018, Orlando, Florida, USA) Vol. 781. Serie Advances in Intelligent Systems and Computing 781, https://doi.org/10.1007/978-3-319-94334-3\_27 Springer. 2019. https://link.springer.com/chapter/10.1007/978-3-319-94334-3\_22

2019 Rybarczyk Y, Villareal S, Gonzalez M, Acosta-Vargas P., Esparza W, Sanchez-Gordon S, Calle- Jimenez T, Jadán J, Nunes IL (to be published) Interaction with a tele-rehabilitation platform through a natural user interface: a case study of hip arthroplasty patients, in Advances in Human Factors and System Interactions, Nunes IL (ed) (Proc. Conf on Human Factors and System Interactions, July 22-26, 2018, Orlando, Florida, USA) Vol. 781. Serie Advances in Intelligent Systems and Computing 781, https://doi.org/10.1007/978-3-319-94334-3\_27 Springer. 2019. https://link.springer.com/chapter/10.1007/978-3-319-94334-3\_25

2019 Calle-Jimenez T, Sanchez-Gordon S, Rybarczyk Y, Jadán J, Villareal S, Esparza W, Acosta-Vargas P., Guevara C, Nunes IL (to be published) Analysis and Improvement of the Web Accessibility of a Tele-rehabilitation Platform for Hip Arthroplasty Patients, in Advances in Human Factors and System Interactions, Nunes IL (ed) (Proc. Conf on Human Factors and System Interactions, July 22-26, 2018, Orlando, Florida, USA) Vol. 781. Serie Advances in Intelligent Systems and Computing 781, https://doi.org/10.1007/978-3-319-94334-3\_27 Springer. 2019.

2018 Acosta-Vargas P., Acosta, T. & Luján-Mora, S. Challenges to Assess Accessibility in Higher Education Websites: A Comparative Study of Latin America Universities, in IEEE Access, vol. 6, DOI: 10.1109/ACCESS.2018.2848978 pp. 36500 – 36508, 2018. https://ieeexplore.ieee.org/document/8388714

2018 Acosta-Vargas P., Acosta T. & Luján-Mora S., “Framework for Accessibility Evaluation of Hospital Websites,” 2018 International Conference on eDemocracy & eGovernment (ICEDEG). 2018, pp. 9-15. doi: 10.1109/ICEDEG.2018.8372368. 2018. https://ieeexplore.ieee.org/abstract/document/8372368

2018 Acosta T. , Acosta-Vargas P. , Luján-Mora S., “Accessibility of eGovernment Services in Latin America,” 2018 International Conference on eDemocracy & eGovernment (ICEDEG), Ambato, Ecuador, 2018, pp. 67-74. doi: 10.1109/ICEDEG.2018.8372332 https://ieeexplore.ieee.org/abstract/document/8372332

2018 Acosta-Vargas, P., Luján-Mora, S., Acosta, T., & Salvador-Ullauri, L. (2018). Toward a Combined Method for Evaluation of Web Accessibility. In International Conference on Information Theoretic Security (pp. 602-613). Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-319-73450-7\_57

2018 Acosta, T., Acosta-Vargas, P., Salvador-Ullauri, L., & Luján-Mora, S. (2018). Method for Accessibility Assessment of Online Content Editors. In International Conference on Information Theoretic Security (pp. 538-551). Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-319-73450-7\_51

2017 Acosta-Vargas, P., Luján-Mora, S., & Acosta, T. (2017). Accessibility of Portable Document Format in Education Repositories. In Proceedings of the 2017 9th International Conference on Education Technology and Computers (pp. 239-242). ACM. https://dl.acm.org/citation.cfm?id=3175574

2017 Acosta, T., Luján-Mora, S., & Acosta-Vargas, P. (2017). Method for Accessibility Assessment of Heading in Online Editors. In Proceedings of the 2017 9th International Conference on Education Technology and Computers (pp. 243-247). ACM. https://dl.acm.org/citation.cfm?id=3175577

2017 Acosta-Vargas P., Luján-Mora S., Acosta, T., & Salvador-Ullauri L.,(2017). Accesibilidad de documentos PDF en repositorios educativos. VIII Congreso Internacional sobre Aplicación de Tecnologías de la Información y Comunicaciones Avanzadas (ATICA2017). ISBN: 978-84-16599-50-9. http://www.cc.uah.es/Atica/documentos/LibroActasATICA2017.pdf

2017 Acosta-Vargas, P., Luján-Mora, S., & Salvador-Ullauri, L. (2017). Web accessibility policies of higher education institutions. In Information Technology Based Higher Education and Training (ITHET), 2017 16th International Conference on (pp. 1-7). IEEE. https://ieeexplore.ieee.org/abstract/document/8067808

2017 Acosta-Vargas, P., Luján-Mora, S., & Salvador-Ullauri, L. (2017). Quality evaluation of government websites. In eDemocracy & eGovernment (ICEDEG), 2017 Fourth International Conference on (pp. 8-14). IEEE. https://ieeexplore.ieee.org/abstract/document/79625072017-2015

2016 Acosta-Vargas, P., Luján-Mora, S., & Salvador-Ullauri, L. (2016). Evaluation of the web accessibility of higher-education websites. In Information Technology Based Higher Education and Training (ITHET), 2016 15th International Conference on (pp. 1-6). IEEE. https://ieeexplore.ieee.org/abstract/document/7760703

2016 Salvador-Ullauri, L., Luján Mora, S., & Acosta-Vargas, P. (2016). Producción de videojuegos orientados a la enseñanza mediante lenguajes de programación por bloques aplicables a aulas virtuales mediante SCORM. ISBN: 978-84-9921-847-2. http://rua.ua.es/dspace/handle/10045/61851

2016 Salvador-Ullauri L., Luján-Mora S., and Acosta-Vargas P. (2016). Tecnología, innovación e investigación en los procesos de enseñanza aprendizaje, Escenarios de aprendizaje basados en TIC. Ediciones OCTAEDRO, S.L. Barcelona, pp. 2992 – 3001. ISBN: 978-84-9921-848-9. https://www.octaedro.com/appl/botiga/client/img/16087.pdf

2016 Salvador-Ullauri L., Luján-Mora S., & Acosta-Vargas P. (2016). Development of serious games using automata theory as support in teaching people with cognitive disabilities. ICERI2016. 9th annual International Conference of Education, Research and Innovation, pp. 4508-4516, ISBN: 978-84-617-5895-1, ISSN: 2340-1095,doi: 10.21125/iceri.2016.2067. https://library.iated.org/view/SALVADORULLAURI2016DEV

2016 Acosta-Vargas P., Luján-Mora S., & Salvador-Ullauri L. (2016). Web accessibility policies in higher education institutions. ICERI2016, Seville, 14th, 15th and 16th of November, ISBN: 978-84-617-5895-1, 9th annual International Conference of Education, Research and Innovation, p. 7298-7305, ISBN: 978-84-617-5895-1, ISSN: 2340-1095, doi: 10.21125/iceri.2016.0657. https://library.iated.org/view/ACOSTAVARGAS2016WEB

2016 Salvador-Ullauri L., Luján-Mora S., & Acosta-Vargas P. (2016). Improving the performance of web servers for educational multiplayer serious videogames. 8th International Conference on Education and New Learning Technologies. Edulearn16. ISBN: 978-84-608-8860-4,ISSN: 2340-1117, pp. 8000-8010, doi: 10.21125/edulearn.2016.0756. https://library.iated.org/view/SALVADORULLAURI2016IMP

2016 Acosta-Vargas P., Luján-Mora S., & Salvador-Ullauri L. (2016). Evaluation of the Accessibility of Higher Education Institutional Web Pages. 8th International Conference on Education and New Learning Technologies. Edulearn16, pp. 7583-7590. ISBN: 978-84-608-8860-4. ISSN: 2340-1117. doi: 10.21125/edulearn.2016.0666. https://library.iated.org/view/ACOSTAVARGAS2016EVA

2016 Acosta-Vargas, P., Luján-Mora, S., & Salvador-Ullauri, L. (2016). Evaluación de la accesibilidad de las páginas web de las universidades ecuatorianas. XI Congreso de Ciencia y Tecnología (ESPE 2016), Revista Congreso de Ciencia y Tecnología, Vol. 11, p. 181-187. ISSN: 1390-4663. http://ciencia.espe.edu.ec/wp-content/uploads/2016/06/Revista\_08\_06\_2016-F.pdf

2015 Más información revisar <http://saccec.com/PatriciaAcosta/publicaciones-2/> y Scholar Google: <https://scholar.google.com/citations?hl=es&user=16_omfwAAAAJ>

## Becas y reconocimientos

2018 Mejor facilitadora de la Escuela Politécnica Nacional, CEC-EPN.

2016 Premio al mejor artículo científico en Ciencias de la Computación del XI Congreso de Ciencia y Tecnología. En la Universidad de las Fuerzas Armadas, 24 de junio de 2016.

2016 Beca otorgada por la Fundación para la Actualización Tecnológica de Latinoamérica, Experta en Tecnología Educativa.

2016 Fundación para la Actualización Tecnológica de Latinoamérica, Experta en Comercio Electrónico.

2015 Beca otorgada por la Fundación para la Actualización Tecnológica de Latinoamérica, Experta en Medios Digitales.

2013 Beca otorgada por la Escuela Politécnica Nacional para estudios de Magíster en Docencia En Instituciones De Educación Superior, Escuela Politécnica Nacional, Quito.

2009 Beca otorgada por la Fundación para la Actualización Tecnológica

de Latinoamérica, Experta en procesos de E-learning.

## Experiencia académica

2006-Actual Universidad de Las Américas (2006- Actual), Docente de Lenguaje Digital, Ética para Arquitectura, Computación Aplicada, Tecnologías de la Información, Negocios Electrónicos, Física, Introducción al Cálculo, Periodismo Digital.

2009 Laureate International Universities, tutora virtual desde 2009 -Actual.

1998-2000 Escuela Politécnica Nacional, Docente de Computación Aplicada, Programación en Delphi.

1999-2015 Escuela Politécnica Nacional, Formación Docente, Diseño de websites, Ofimática, Herramientas web 2.0, Diseño de blogs, Quipux, Compras públicas. Herramientas TIC’s.

2000-Actual Escuela Politécnica Nacional, Facilitadora Certificada por el Centro de Educación continua, Modalidad presencial y virtual (2000- Actual) Facilitadora de Excel Avanzado y Macros, Comercio Electrónico, Formación Docente, Ms Project, Base de Datos, Compras Públicas, Herramientas TIC’s.

2012-2017 Universidad Central del Ecuador Docente de la Maestría de Gestión de Calidad. Formación Docente.

2010-2013 Universidad Central del Ecuador, Formación Docente, Herramientas TIC’s, Moodle, Sakai.

2013-2016 Universidad Técnica Particular de Loja, Docente virtual del módulo de Comercio Electrónico, Excel y Macros.

2012-2017 Universidad Técnica de Ambato, colaboración en seminarios y conferencias en varias carreras.

2013-2014 Universidad Indoamérica, Sistemas Operativos, Conferencias varias.

2000-2012 Universidad Politécnica Salesiana, Facilitadora de seminarios.