CURRICULUM VITAE ABREVIADO (CVA)

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

Part A. PERSONAL INFORMATION

First name	Maria José		
Family name	Escalona		

A.1. Current position

Position	Catedrática de Universidad
Initial date	2018
Institution	Universidad de Sevilla
Department/Center	Lenguajes y Sistemas Informáticos
Country	Spain
Key words	Software Engineering, Software quality assurance, Software requirements, early testing, gamification

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

Period	Position/Institution/Country/Interruption cause
2017-2018	Maternity (18 Months)
2011-2018	Assistant profesor (TU) / Universidad de Sevilla / España
2005-2011	Assintant profesor/ Universidad de Sevilla / España
2000-2005	Associated Proffessor / Universidad de Sevilla / España
1999-2001	Analyst/Junta de Andalucia/ España
1998-2000	Freelance/ España

A.3. Education

Ph.D. Computer Science	Universidad de Sevilla	2004
Ingenierio Superior en Ingeniería Informática	Universidad de Sevilla	1999
Ingeniería Técnica en Informática de Gestión	Universidad de Sevilla	1997

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

M.J. Escalona obtained a PhD in Computer Engineering in 2004 (international mention) at the University of Seville. She has been working as a PDI associated with the Department of Computer Languages and Systems of said University since the year 2000, and she is currently a Full Professor. Her lines of research focus on software engineering, especially in the earliest stages of the life cycle, more precisely with effective and efficient collaboration with users. Thus, she has made significant contributions in the fields of Requirements Engineering, early testing, early quality assurance, and software processes. She has more than **220 publications**, including specialized forums with a high international impact on her research topics. She has been the director of the TIC 021- Engineering and Science for Software Systems (ES3) group since its creation and has participated in and directed many research projects, including competitive regional projects, national projects, such as National Plan Projects, and international projects. She is the coordinator of the current project, SiTPGa (PID2019-105455GB-C31). She has been the leader of several research networks and the organizer of several congresses and meetings of international impact, e.g., ISD 2013, AST 2019, among others. She is a member of the editorial board of several impact magazines, such as IT Professional and JWE, and she is a regular contributor to journal and conference program committees. In addition, she has carried out management tasks in evaluation processes as assistant to the Coordination team of the Computer Science and Information Technology area in the Software Engineering, Database and Security sub-area of the Ministry of Economy and Competitiveness (2011-2015), the Deputy Director of International and Business Relations of the Higher Technical School of Computer Engineering (ETSII) (2014-2017) and the Deputy

Director of University Extension and International Relations (2010-2014) at the same school. In addition, she has been a quality evaluator positions in organizations such as ANECA where she has belonged to the Title Evaluation Commission for the Engineering and Architecture branch since 2019, in the mirror commission of the 2021 Six-Year Evaluation, as a member of EVALUA panels, in AQUIB where she belongs to the degree evaluation commission since 2018, or ACPUA in the PhD evaluation commission in Engineering and Architecture. Her participation in evaluation processes has also transcended international evaluation agencies like the Sweden council or DAAD. She has carried out many research stays in centers of high prestige, both national and international, and has collaborated with different schools as a visiting professor. She is currently a visiting professor at the WSZIB in Krakow. She has **3 six-year research periods** recognized by CNAI (last 2020). Among its most notable research results, it is worth highlighting her transfer to the enterprise. With the development of the SofIA methodology (previously called NDT), the main result of her thesis, she has managed to develop a set of methodological solutions for the development and quality assurance that has been widely used in the Andalusian and national business enterprise and even by international companies. These transfer outcomes can be measured not only in transfer projects but also in the number of publications with companies and in the tools registered both at the University and with companies or even in the exploitation patents she owns. In the last five years, she has transferred the results of her research to organizations and companies for more than 3.5 million euros. She maintains a close collaboration with the business fabric and belongs to business advisory committees such as the board of directors of "INPRO-Diputación de Sevilla" (since 2018), the "ICT-2020 council of the Junta de Andalucía", the "I observatorio nacional del metaverso" or the "S4 network of the FAMP", among others. She has a large number of patents and registration of software (41), all of them transferred to the business community. For all this, she has **one six-year transfer period** recognized by the CNAI.

Regarding her contributions to the training of young researchers, she has directed and tutored **15 doctoral theses**, has participated as director in FPU and regional programs for young researchers, and has been part of the committee in thesis and dissertation evaluation as well as in the evaluation of competitive programs on an international level. She has directed many bachelor's and master's theses throughout her career, and has been a supervisor of national and international student internships and mobility programs at ETSII for more than 8 years. All this work has allowed her to receive different awards, such as the Fujitsu Award for Innovation (2015), the ROME-University, Women, and Business. Inclusive Woman Category: Social Commitment and CSR (2021 edition) or the Light Award for Trajectory (2022)

Part C. RELEVANT MERITS *(sorted by typology)*
C.1. Publications *(see instructions)*

1. **Journal (JCR Q1).** Olivero, Miguel A.; Bertolino, Antonia; Dominguez-Mayo, Francisco José; Matteucci, Ilaria; Escalona, María José. (5/5). 2022. A Delphi Study to Recognize and Assess Systems of Systems Vulnerabilities INFORMATION AND SOFTWARE TECHNOLOGY. ELSEVIER SCIENCE BV. 146. ISSN 0950-5849, ISSN 1873-6025. https://doi.org/10.1016/j.infsof.2022.106874. (2)

2. **Journal (JCR Q2).** Hinderks, Andreas; Winter, Dominique; Domínguez Mayo, Francisco José; Escalona, María José; Thomaschewski, Jörg. (4/5). 2022. UX Poker: Estimating the Influence of User Stories on User Experience in Early Stage of Agile Development INTERNATIONAL JOURNAL OF INTERACTIVE MULTIMEDIA AND ARTIFICIAL INTELLIGENCE. IMAI SOLUTIONS. 7-7, pp.97-104. ISSN 1989-1660. https://doi.org/10.9781/ijimai.2022.11.007.

3. **Journal (JCR Q1).** Cabello Ruiz, Rafael; Jiménez Ramírez, Andrés; Escalona Cuaresma, María José; González Enríquez, José. (3/4). 2022. Hybridizing humans and robots: an RPA horizon envisaged from the trenches COMPUTERS IN INDUSTRY. ELSEVIER SCIENCE BV. 138. ISSN 0166-3615, ISSN 1872-6194. (7) https://doi.org/10.1016/j.compind.2022.103615.

4. **Journal (JCR Q2).** Escalona, María José; Koch, Nora; García-Borgoñón, Laura. (1/ 3). 2022. Lean requirements traceability automation enabled by model-driven engineering PEERJ COMPUTER SCIENCE. PEERJ INC. 8. ISSN 2376-5992. https://doi.org/10.7717/PEERJ-CS.817. (3)

5. **Journal (JCR Q1).** Hinderks, Andreas; Mayo, Francisco José Domínguez; Thomaschewski, Jörg; Escalona, María José. (4/4). 2022. Approaches to manage the user

experience process in agile software development: A systematic literature review INFORMATION AND SOFTWARE TECHNOLOGY. ELSEVIER SCIENCE BV. 150. ISSN 0950-5849, ISSN 1873-6025.() https://doi.org/10.1016/j.infsof.2022.106957. (4)

6. **Journal (SJR Q4).** Escalona, María José; de Koch, Nora Parcus; Rossi, Gustavo. (1/3). 2022. A quantitative SWOT-TOWS analysis for the adoption of model-based software engineering JOURNAL OF OBJECT TECHNOLOGY. JOURNAL OBJECT TECHNOLOGY. 21-4. ISSN 1660-1769. (1) https://doi.org/10.5381/jot.2022.21.4.a9

7. **Journal (JCR Q1).**. Blanco, Raquel; Enríquez, José G.; Domínguez-Mayo, Francisco J.; Escalona, M. J.; Tuya, Javier. (4/5). 2018. Early Integration Testing for Entity Reconciliation in the Context of Heterogeneous Data Sources IEEE TRANSACTIONS ON RELIABILITY. IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC. 67-2, pp.538-556. ISSN 0018-9529, ISSN 1558-1721. (16) https://doi.org/10.1109/TR.2018.2809866.

8. **Journal (JCR Q1).**. Barcelona, M. A.; García-Borgoñón, L.; Escalona, M. J.; Ramos, I.(3/4). 2018. CBG-Framework: A bottom-up model-based approach for Collaborative Business Process Management COMPUTERS IN INDUSTRY. ELSEVIER SCIENCE BV. 102, pp.1-13. ISSN 0166-3615, ISSN 1872-6194. (9) https://doi.org/10.1016/j.compind.2018.06.002

C.2. Congress

1. **International Conference**. Hinderks, A., Mayo, F. J. D., Thomaschewski, J., & Escalona, M. J. (2020, June). An SLR-tool: Search process in practice: A tool to conduct and manage systematic literature review (SLR). In *Proceedings of the ACM/IEEE 42nd International Conference on Software Engineering: Companion Proceedings* (pp. 81-84). Demo tool (5)

2. **International Conference**. Cabello, R., Escalona, M. J., & Enríquez, J. G. (2020, September). Beyond the Hype: RPA Horizon for Robot-Human Interaction. In *International Conference on Business Process Management* (pp. 185-199). Springer, Cham. (7)

3. **International Conference**. Olivero, M. A., Bertolino, A., Dominguez-Mayo, F. J., Escalona, M. J., & Matteucci, I. (2019, September). Addressing security properties in systems of systems: Challenges and ideas. In *International Workshop on Software Engineering for Resilient Systems* (pp. 138-146). Springer, Cham. (7)

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. **Project.** PID2019-105455GB-C31, Nuevas Iniciativas para el Aseguramiento Temprano de la Calidad Funcional y no Funcional en Procesos y Productos Software Orientados al Usuario. Ministerio de Ciencia, Innovación y Universidades. Escalona Cuaresma, María José and Dominguez Mayo, FJ. 01/06/2020-31/05/2023. 125.114 €. PI

2. **Project.** P20_00644, SmartAuditor: Testeo temprano de Contratos Inteligentes en entornos de Cadenas de Bloques para elegir socios en el emprendimiento. Consejería de Economía, Conocimiento, Empresas y Universidad. Escalona Cuaresma, María José. 05/10/2021- 31/12/2022. 124.600 €. PI

3. **Project.** US-1251532, NDT 4.0. Mecanismos para el diseño y gestión de software orientados al usuario. Junta de Andalucía (Consejería de Economía y Conocimiento). Escalona Cuaresma, María José. 01/02/2020-31/01/2022. 89.150 €. PI

4. **Project.** TIN2016-76956-C3-2-R, Explorando Soluciones Guiadas para Sistematizar el Aseguramiento Temprano de la Calidad del Software. Ministerio de Economía y Competitividad. Escalona Cuaresma, María José. 30/12/2016-29/12/2020. 219.252 €. PI

5. **Project.** PI012-18/E30, DIgitalization of ground-testing Life cycle with ECO design criteria. Comisión Europea. Eguía Salinas, Ignacio. 01/03/2018-31/10/2020. 136.625 €. PI

6. **Project.** RTC-2016-5824-1, Diseño de un marco de trabajo basado en herramientas para mejorar la gestión de guisas clínicas y procesos asistenciales (IDE4ICDS). Ministerio de Economía y Competitividad. Escalona Cuaresma, María José. 01/09/2016- 31/12/2019. 150.380 €.PI

C.4. Contracts, technological or transfer merits

1. **Contract.** Waste, Plataforma Calidad de Servicios de Limpieza y Recogida de Residuos. WELLNESS TELECOM S.L.. Escalona Cuaresma, María José. 21/06/2021- 29/09/2021. 31.356 €. PI.
2. **Contract.** DEDALOW Instituto Tecnológico de Aragón. Escalona Cuaresma, María José. 01/05/2021-01/04/2022. 25.000 €. PI.
3. **Contract.** Generador de escenarios SEABERY SOLUTIONS. Escalona Cuaresma, María José. 02/03/2021-01/07/2022. 51.500 €. PI
4. **Contract.** TRAzabilidad de Muestras BIológicaS de Reproducción Humana Asistida (TRABIS) Inebir Technology, S.L. Escalona Cuaresma, María José. 02/03/2021-01/01/2022. 50.000 €. PI
5. **Contract.** AIRPA: Potenciar la automatización de procesos RPA con componentes AI Servinform, S.A.. Escalona Cuaresma, María José. 01/05/2019-01/07/2021. 80.000 €.
6. **Contract.** proCesamientO Digital Inteligente de ContEnidos(CODICE) Servinform, S.A. Escalona Cuaresma, María José. 01/07/2020-31/12/2022. 80.000 €. PI
7. **Patent of invention**. Ortega Ramirez, Juan A; Silva Gallego, Ana; Gonzalez Abril, Luis; Velasco Morente, Francisco; Torres Valderrama, Jesus; Escalona Cuaresma, Mª Jose; Alvarez Garcia, Juan Antonio; Alvarez De La Concepcion, Miguel Angel; Fernandez Montes, Alejandro; Fuentes Brenes, Daniel; Angulo Bahon, Cecilio. ES2386134B1. SCI (simple cluster interface): arquitectura para la gestión de tareas de usuario en un cluster a través de la web 16/04/2013. UNIVERSIDAD DE SEVILLA. PI
8. Software Registration. I have 41 software registration transference to the industry. Detail available in: https://investigacion.us.es/sisius/sis_showpub.php?idpers=4066.
9. Member of several advisors commissions for industry: Consejo de Administración INPRO-Diputación de Sevilla (since 2016), Networks Andalucia S4 (Junta de Andalucia), WomANDigital (since 2015), Observatorio Nacional Metaverso (since 2022), among others.

C5. Others

1. **Awards:** Fujitsu Award for Innovation (2015); ROME price-University, Women, and Business. Inclusive Woman Category: Social Commitment and CSR (2021 edition) or the Light Award for Trajectory (2022).
2. **Management experience:** Assistant to the Coordination team of the Computer Science and Information Technology area in the Software Engineering, Database and Security sub-area of the Ministry of Economy and Competitiveness (2011-2015). The Deputy Director of International and Business Relations of the Higher Technical School of Computer Engineering (2014-2017). The Deputy Director of University Extension and International Relations (2010-2014). Permanent assistant on the Title Evaluation Commission for the Engineering and Architecture- ANECA (since 2019). Member in the mirror commission of the 2021 Six-Year Evaluation-ANECA, among others.
3. **Evaluation:** Deeply experience in the evaluation of research in PhD-thesis, projects or cvs in different national and international agency, programs and calls.