









# A Framework for Green IT Governance, Management and Auditing

José David Patón Romero Mario Piattini Maria Teresa Baldassarre

Co-tutele agreement between the University of Castilla-La Mancha (UCLM) and the University of Bari Aldo Moro (UniBa)

- 1. Introduction
- 2. Research Plan
- 3. Current Results
- 4. Conclusions



#### 1. Introduction

- About the Main Researcher
- Research Approach
- 2. Research Plan
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#### Introduction (About the Main Researcher)

- BSc and MSc with honors in Computer Science Engineering from UCLM.
- CISA (Certified Information Systems Auditor) by ISACA.
- PMP (Project Management Professional) by PMI.



José David Patón Romero
PhD Student at UCLM and UniBa

Research interests: governance, management and auditing of Green IT.



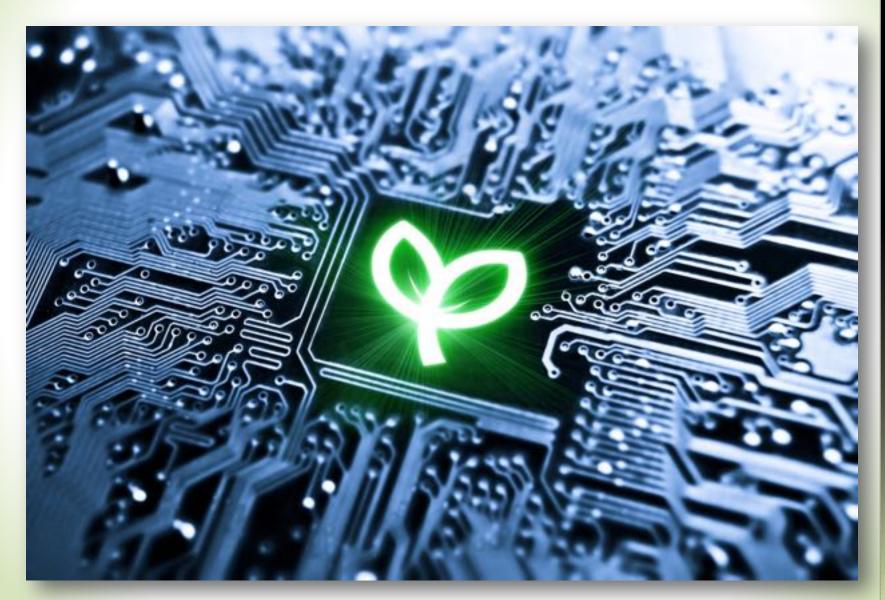
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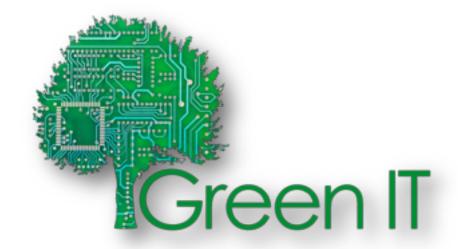












"The study and practice of design, manufacture and use of hardware, software and information technologies with a positive impact on the environment"



## **Governance and Management Framework for Green IT**

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## Research Plan





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## **Current Results**

- [1] J. D. Patón-Romero, M. T. Baldassarre, M. Piattini, and I. García Rodríguez de Guzmán. *A Governance and Management Framework for Green IT*, Sustainability, 9 (10), (2017), 1761. (Q2 JCR)
- [2] J. D. Patón-Romero, M. Rodríguez, and M. Piattini. *A SPICE-Based Maturity Model for the Governance and Management of Green IT*. In: 17<sup>th</sup> International SPICE Conference (SPICE 2017), pp. 143-155. (Selected for Computer Standards & Interfaces Q2 JCR)
- [3] J. D. Patón-Romero and M. Piattini. *Modelos de Madurez de Green IT: Un Mapeo Sistemático*. In: 12ª Conferência Ibérica de Sistemas e Tecnologias de Informação (CISTI'2017), pp. 2110-2115. (Selected for IJISEBC)
- [4] J. D. Patón-Romero and M. Piattini. *Auditorías de Green in IT: Un Mapeo Sistemático*. In: XXI Jornadas de Ingeniería del Software y Bases de Datos (JISBD 2016), pp. 577-590.
- [5] J. D. Patón-Romero and M. Piattini. *Indicators for Green in IT Audits: A Systematic Mapping Study*. In: 3<sup>rd</sup> International Workshop on Measurement and Metrics for Green and Sustainable Software Systems (MeGSuS'16), pp. 4-12.
- [6] J. D. Patón-Romero and M. Piattini. *GreenITAudit: A Tool to Audit the Green IT*. In: 2<sup>nd</sup> Green in Software Engineering Workshop (GInSEng 2016).



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### Conclusions

Increasing relevance of Green IT as a strategy to add value to business.

The first version of the framework provides a complete guide to the organizations in their efforts to implement, control and/or improve the practices of Green IT.















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