CURRICULUM VITAE

LAST NAME AND NAME: **Garijo Verdejo, Daniel**
EMAIL: **professional: dgarijo@isi.edu (personal: dgarijov@gmail.com)**
COUNTRY: **Spain**

ACADEMIC DEGREES:

1. **PhD in Artificial Intelligence** (December, 2015), by the Universidad Politécnica de Madrid. Thesis title: "Mining Abstractions in Scientific Workflows" **[Garijo2015]** (Supervisors: Oscar Corcho, Yolanda Gil).
2. **MSc in Artificial Intelligence Research**, by the Universidad Politécnica de Madrid (February, 2011). Title: "A provenance enabled service for news and blog aggregation" **[Garijo 2011]** (Supervisors: Oscar Corcho and Boris Villazón Terrazas).
3. **BSc in Computer Science** by the Universidad Complutense de Madrid (July, 2009).

CURRENT POSITION:

PhD Researcher (Artificial Intelligence) at the Universidad Politécnica of Madrid

INTERNSHIPS

1. **Information Sciences Institute (USC)** with Yolanda Gil (Mar 2014 - Jun 2014).
2. **Information Sciences Institute (USC)** with Yolanda Gil (Jul 2012 - Oct 2012).
3. **Information Sciences Institute (USC)** with Yolanda Gil (Jul 2011 - Oct 2011): Collaboration with UCSD's School of Pharmacy (Phil Bourne's group).

HONORS AND AWARDS

1. **FPU Scholarship (Training Fellowship for University Personnel)** December, 2011- present.
2. **OTT Scholarship (Technology Transfer Office)** from 2009 to 2011.
3. First Competition on Open Data organized by Junta de Castilla y León (Special mention). For "Map4RDF-iOS", 2013.
4. **Triplification Challenge** (Application track, 2011). For "A provenance Aware Linked Data Application for Trip Management and Organization" [**Garijo et al 2011**].

RESEARCH PROJECTS

1. **Wf4Ever** (December 2010- December 2013), where UPM lead a work package on workflow evolution, sharing and collaboration. The main objective was to provide adequate means to maximize share and reuse of the preserved Research Objects, while supporting their evolution and versioning and facilitating collaboration among scientists. My main role consisted on participating on the modeling discussions, which lead to the Research Object Model specification [**Belhajjame et al 2015**], and creating a corpus of workflows from Taverna and Wings [**Belhajjame et al 2013**].
2. **Web N+1 project** (April 2009- December 2011), where my main role focused on modeling the provenance of the information in a news and blogs scenario in order to calculate a trust value for the published information. As a result, a provenance repository was published online, and the application exploiting its information won the first prize in the Triplification Challenge [**Garijo et al 2011**].

PUBLICATIONS

JOURNAL PUBLICATIONS

1. [Belhajjame et al 2015]: Khalid Belhajjame, Jun Zhao, Daniel Garijo, Kristina Hettne, Raúl Palma, Oscar Corcho, Jose Manuel Gómez-Pérez, Sean Bechhofer, Graham Klyne and Carole Goble. **Using a suite of ontologies for preserving workflow-centric Research Objects**. Journal of Web Semantics: Science, Services and Agents on the World Wide Web. Volume 32, pages 16-42. 2015.

2. [Garijo et al 2013(a)]: Daniel Garijo, Pinar Alper, Khalid Belhajjame, Oscar Corcho, Yolanda Gil, Carole Goble. **Common motifs in scientific workflows: An empirical analysis** (extended version). Future Generation Computer Systems. Volume 36, pages 338-351. 2013.
3. [Garijo et al 2013(b)]: Daniel Garijo, Sarah Kinnings, Li Xie, Lei Xie, Yinliang Zhang, Philip E. Bourne,Yolanda Gil. **Quantifying reproducibility in computational biology: The case of the tuberculosis drugome**. PLoS ONE 8(11): e80278. 2013.
4. [Atemezing et al 2012]: Ghislain Atemezing, Oscar Corcho, Daniel Garijo, José Mora, María Poveda-Villalón, Pablo Rozas, Daniel Vila-Suero, Boris Villazón-Terrazas**. Transforming meteorological data into Linked Data**. Semantic Web Journal 4(3) 285-290. 2012.

CONFERENCE PUBLICATIONS

1. [Gil et al]: Yolanda Gil, Varun Ratnakar, Daniel garijo. OntoSoft: Capturing Scientific Software Metadata. 8th International Conference on Knowledge Capture (K-CAP 2015), art nº 32. Palisades, NY, USA. 2015.
2. [Garijo et al 2014(a)]: Daniel Garijo, Oscar Corcho, Yolanda Gil, Boris Gutman, Ivo D. Dinov, Paul Thompson and Arthur W. Toga. **FragFlow: Automated fragment detection in scientific workflows**. 10th IEEE International Conference on e-Science, pp 281-289, Guaruja, Brasil. 2014.
3. [Garijo et al 2014(b)]: Daniel Garijo, Oscar Corcho, Yolanda Gil, Meredith N. Braskie, Dereck Hibar, Xie Hua, Neda Jahanshad, Paul Thompson and Arthur W. Toga. **Workflow reuse in practice: A study of neuroimaging pipeline users**. 10th IEEE Conference on e-Science, pp239-246, Guaruja, Brasil. 2014.
4. [Garijo et al 2013(c)]: Daniel Garijo, Oscar Corcho and Yolanda Gil. **Detecting common scientific workflow fragments using templates and execution provenance.** Proceedings of the seventh international conference on Knowledge capture, pp 33-40. Banff, Canada. 2013.
5. [Garijo et al 2012]: Daniel Garijo, Pinar Alper, Khalid Belhajjame, Oscar Corcho, Yolanda Gil, Carole Goble. **Common motifs in scientific workflows: An empirical analysis**. 8th IEEE International Conference on e-Science (eScience 2012), pp1-8. Chicago, USA 2012.
6. [Garijo et al 2011]: Daniel Garijo, Boris Villazón-Terrazas and Oscar Corcho. **A provenance aware Linked Data application for trip management and organization**. I-Semantics 2011. pp 224-226, The Hague, 2011 (winner of the Trplification challenge).
7. [Eckert et al 2011]: Kai Eckert, Daniel Garijo and Michael Panzer. **Extending DCAM for metadata provenance**. International Conference on Dublin Core and Metadata Applications, (DC-2011). The Hague.

PEER REVIEWED WORKSHOPS

1. [Garijo et al 2015]: Daniel Garijo, Nandana Mihindukulasooriya, Oscar Corcho. **LDP4ROs: Managing research objects with the W3C Linked Data platform**. In SAVE-SD, co-located with the International Conference on World Wide Web 2015, pp 1057-1058. Florence, Italy.
2. [Garijo et al 2014(c)]: Daniel Garijo, Yolanda Gil, Oscar Corcho. **Towards workflow ecosystems through standard representations**. In 9th Workshop on Workflows in Support of Large-Scale Science (WORKS14), held in conjunction with the International Conference for High Performance Computing, Networking, Storage and Analysis (SC14), pp94-104. New Orleans, US, 2014.
3. [Garijo et al 2014(d)]: Daniel Garijo, Andreas Harth, Yolanda Gil. **User requirements for geospatial provenance**. In Provenance Analytics, co-located with the Fifth International Provenance and Annotation Workshop (IPAW), Cologne, Germany, 2014.
4. [Holl et al 2013]: Sonja Holl, Daniel Garijo, Khalid Belhajjame, Olav Zimmermann O, Renato De Giovanni, Mattias Obst, Carole Goble. **On specifying and sharing scientific workflow optimization results using research objects**. Proceedings of the 8th Workshop on Workflows in Support of Large-Scale Science (WORKS13), held in conjunction with the International Conference for High Performance Computing, Networking, Storage and Analysis (SC13) pp 28-37. Denver, US, 2013.
5. [Belhajjame et al 2013] Khalid Belhajjame, Jun Zhao, Daniel Garijo, Aleix Garrido, Stian Soiland-Reyes, Pinar Alper, Oscar Corcho. **A workflow PROV-corpus based on Taverna and Wings**. Proceedings of the Joint 16th International Conference on Extending Database Technology/ 16th International Conference on Database Theory Workshops (EDBT/ICDT 2013), pp 331-332 (ACM).

6. [Garijo and Gil 2012]: Daniel Garijo, Yolanda Gil. **Augmenting PROV with plans in P-PLAN: Scientific processes as Linked Data**. In Second International Workshop on Linked Science: Tackling Big Data (LISC), held in conjunction with the International Semantic Web Conference (ISWC), Boston, MA, 2012.
7. [Belhajjame et al 2012]: Khalid Belhajjame, Oscar Corcho, Daniel Garijo, Jun Zhao, Paolo Missier, David Newman, Raul Palma, Sean Bechhofer, Esteban García Cuesta, Jose Manuel Gomez-Perez, Graham Klyne, Kevin Page, Marco Roos, Jose Enrique Ruiz, Stian Soiland-Reyes, Lourdes Verdes-Montenegro, David De Roure, Carole A. Goble. **Workflow-centric research objects: First class citizens in scholarly discourse**. Workshop on the Semantic Publishing, (SePublica 2012), held in conjunction with the 9th Extended Semantic Web Conference Hersonissos, Crete, Greece, May 28, 2012.
8. [Garijo and Gil 2011]: Daniel Garijo and Yolanda Gil. **A new approach for publishing workflows: Abstractions, standards, and Linked Data**. In Proceedings of the Sixth Workshop on Workflows in Support of Large-Scale Science (WORKS'11), held in conjunction with the International Conference for High Performance Computing, Networking, Storage and Analysis (SC11), Seattle, Washington.
9. [Garijo et al 2011]: Daniel Garijo, Boris Villazón-Terrazas and Oscar Corcho. **A provenance enabled service for news and blog aggregation**. Poster in "Red Temática de Linked Data". 2011.

THESES

1. [Garijo 2015]: Daniel Garijo. **Mining abstractions in scientific workflows**. PhD thesis. Supervisors: Oscar Corcho and Yolanda Gil.
   URL: https://dl.dropboxusercontent.com/u/16510488/Thesis.pdf
2. [Garijo 2011]: Daniel Garijo. **A Provenance-Enabled Service for News and Blog Aggregation.** MSc thesis. Supervisors: Oscar Corcho and Boris Villazón-Terrazas.
   URL: http://oa.upm.es/6567/

DELIVERABLES AND PROJECT REPORTS

1. [Garijo and Villazon 2010(a)]: Daniel Garijo and Boris Villazón. "Deliverable E 1.1, PT1, Project Web N+1: State of the art". 2010.
2. [Garijo and Villazon 2010(b)]: Daniel Garijo and Boris Villazón. "Deliverable E 2.2, PT2 , Project Web N+1: Definition of the modules of the system". 2010

STANDARDIZATION REPORTS

1. [Gil et al 2012]: Yolanda Gil., Simon Miles., Khalid Belhajjame, Helena Deus, Daniel Garijo, Graham Klyne, Paolo Missier, Stian Soiland-Reyes and Stephan Zednik. **A primer for the PROV provenance model.** 2012. World Wide Web Consortium (W3C).
2. [Sahoo et al 2012]: Satya Sahoo, Timothy Lebo and Deborah McGuinness (eds.) Khalid Belhajjame, James Cheney, Daniel Garijo, Stian Soiland-Reyes, and Stephan Zednik. **PROV-O: The PROV ontology.** 2012. World Wide Web Consortium (W3C).
3. [Gil et al 2010]: Yolanda Gil, James Cheney, Paul Groth, Olaf Hartig, Simon Miles, Luc Moreau, Paulo Pinheiro da Silva, Sam Coppens, Daniel Garijo, Jose Manuel Gomez, Paolo Missier, Jim Myers, Satya Sahoo, Jun Zhao. **Provenance XG final report.** W3C Incubator Group Report 08 December 2010. World Wide Web Consortium (W3C).

TEACHING

1. Tutorial: Daniel Garijo. PROV-O: The W3C Provenance Ontology. International Conference on Dublin Core and Metadata Applications (DC-2013), Lisbon, 2013.
2. Tutorial: Rudolf Mayer, Stefan Pröll, Andreas Rauber, Raul Palma, Daniel Garijo. From Preserving Data to Preserving Context. In International Conference on Theory and Practice of Digital Libraries (TPDL), Malta, 2013.

SERVICE

1. Invited participant of the **Dagstuhl Seminar: Principles of Provenance**.
2. Member of the **W3C Provenance Working Group** (2011-12), which is building a family of specifications for representing and exchanging provenance in the Web.

3. Member of the **W3C Provenance Incubator Group** (2010), which provided a state-of-the art understanding and a roadmap in the area of provenance for Semantic Web technologies, development, and possible standardization (link to final report.
4. Member of the **Dublin Core Metadata Provenance Task Group** (2010-12), which aims to define a Dublin Core application profile for representing metadata provenance.
5. Reviewer in journals: Future Generation Computer Systems, Journal of Web Semantics, Semantic Web Journal, International Journal of Web Information Systems.
6. Reviewer in Conferences (part of the PC): International Conference on Knowledge capture (K-CAP), ESWC
7. Reviewer in conferences (not part of the PC): International World Wide Web Conference (WWW2014), Extended Semantic Web Conference (ESWC).
8. Reviewer in Workshops (part of the PC): International Workshop on Managing and Querying Provenance Data at Scale (BigProv), Workshop on Semantic Web Enterprise Adoption and Best Practice (WASABI-2013, WASABI2014), International Workshop on Methods for Establishing Trust of (Open) Data (Method2014), Workshop on Linked Science (LISC 2014), International Provenance and Annotation Workshop (IPAW 2014).
9. Reviewer in Workshops (not part of the PC): EXperience reuse: Provenance, Process-ORientation and Traces (EXPPORT).

PRESENTATIONS

1. Publicación de datos y métodos científicos en investigación. Presented in the W3C Day in Spain: the future of digital edition. 2015. Slides: http://www.slideshare.net/dgarijo/publicacin-de-datos-y-mtodos-cientficos-en-investigacin
2. Is preserving data enough? Towards the preservation of scientific methods. Presented in the open research data day 2015.Warsaw, 2015. Slides: http://www.slideshare.net/dgarijo/open-research-data-day-is-pre
3. FragFlow: automated fragment detection in scientific workflows. Presented in eScience 2014 **[Garijo et al 2014(a)]**. Slides: http://www.slideshare.net/dgarijo/frag-flow-automatedfragmentdetectioninscientificworkflows
4. Workflow reuse in practice: A study of neuroimaging pipeline users. Presented in eScience 2014 **[Garijo et al 2014(b)]**. Slides: http://www.slideshare.net/dgarijo/workflow-reuseinloni
5. Using requirements for geospatial provenance. Presented in IPAW14. **[Garijo et al 2014(d)]** Slides: http://www.slideshare.net/dgarijo/user-requirments-for-geospacial-provenance
6. Research objects in scientific publications. Presented in the Universidad Politécnica of Madrid, 2013. Slides: https://www.slideshare.net/dgarijo/research-objects-in-scientific-publi
7. Detecting common scientific workflow fragments using templates and execution provenance. Scheduled to be presented at K-CAP2013 **[Garijo et al 2013(c)]** (The conference got cancelled due to weather conditions). Slides: https://www.slideshare.net/dgarijo/kca-24834329
8. PhD Status report. Presented in the Universidad Politécnica de Madrid, 2012. Slides: http://www.slideshare.net/dgarijo/presentacion-oeg29-112012
9. Common Motifs in Scientific Workflows: An Empirical Analysis. Presented in e-Science 2012 **[Garijo et al 2012]**. Slides: http://www.slideshare.net/dgarijo/common-motifs-in-scientific-workflows-an-empirical-analysis
10. A new approach for publishing workflows: Abstractions, Standards and Linked Data. Presented in the WORKS11 workshop **[Garijo and Gil 2011]**.
    Slides: http://www.slideshare.net/dgarijo/works-11-presentation