# Rafael Angarita

# Associate Professor

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# Education

## 2012–2015 Ph.D., Computer Science.

Title: An Approach for Self-healing Transactional Composite Services. Laboratory: LAMSADE, Université Paris-Dauphine, Paris, France.

Advisors: Marta RUKOZ and Maude MANOUVRIER.

- Stephan REIFF-MARGANIEC, University of Leicester, UK.
- o Muhammad YOUNAS, Oxford Brookes University, UK.

- Daniela GRIGORI, Université Paris-Dauphine, France.
- Schahram DUSTDAR, Vienna University of Technology, Austria.
- o Pierre SENS, Université Paris 6 Pierre et Marie Curie, France.

Ph.D. thesis award: Jeune Chercheur award 2016 of the Paris-Dauphine Foundation.

#### 2009–2012 M.Sc., Computer Science.

Laboratory: LDC, Universidad Simón Bolívar, Caracas, Venezuela.

# Professional Experience

# Teaching and Research

- 2016–2017. Associate Professor, Isep.
- 2017-today. Associate Researcher, French Institute for Research in Computer Science and Automation (INRIA).
- 2016–2017. Postdoctoral Researcher, French Institute for Research in Computer Science and Automation (INRIA) as part of the CityLab@Inria and Inria@SiliconValley program.
- 2015–2016. Research and Teaching Assistant, Université Paris Ouest Nanterre La Défense, Nanterre, France.
- 2012–2015 Research and Teaching Assistant, Université Paris-Dauphine, Paris, France.
- 2011–2012 Adjunct Professor, Universidad Simón Bolívar, Caracas, Venezuela.
- 2007–2008 Adjunct Professor, Universidad Católica Andrés Bello, Caracas, Venezuela.
- 2004–2006 Teaching Assistant, Universidad Católica Andrés Bello, Caracas, Venezuela.

#### Software Developer

- 2010-2012 Software Developer, Centro Nacional de Tecnologías de Información (CNTI), Caracas, Venezuela/Montevideo, Uruguay.
- 2007–2009 **Software Developer**, Bamboo Solutions, Caracas, Venezuela, Software Developer.
- 2006–2009 **Software Developer**, *Alterity Solutions*, Caracas, Venezuela.
  - 2005 **Software Developer**, *Softech*, Caracas, Venezuela.

### **Publications**

### Journal Articles

- [1] Rafael Angarita, Marta Rukoz, and Yudith Cardinale. Modeling dynamic recovery strategy for composite web services execution. World Wide Web, pages 1–21, 2015.
- [2] Rafael Angarita, Yudith Cardinale, and Marta Rukoz. Reliable Composite Web Services Execution: Towards a Dynamic Recovery Decision. *Electronic Notes in Theoretical Computer Science*, 302(0):5 28, 2014.
- [3] Yudith Cardinale, Marta Rukoz, and Rafael Angarita. Modeling Snapshot of Composite WS Execution by Colored Petri Nets. In *Resource Discovery*, volume 8194 of *Lecture Notes in Computer Science*, pages 23–44. Springer Berlin Heidelberg, 2013. Conference and Workshop Papers
- [4] Rafael Angarita, Nikolaos Georgantas, and Valérie Issarny. Usnb: Enabling universal online social interactions. In 2017 IEEE 3rd International Conference on Collaboration and Internet Computing (CIC), pages 309–318, Oct 2017 (Best Paper Award).
- [5] Rafael Angarita, Nikolaos Georgantas, Cristhian Parra, James Holston, and Valerie Issarny. Leveraging the Service Bus Paradigm for Computer-mediated Social Communication Interoperability. In *International Conference on Software Engineering* (ICSE), Software Engineering in Society (SEIS) Track, 2017.
- [6] Rafael Angarita, Marta Rukoz, Maude Manouvrier, and Yudith Cardinale. A Knowledge-based Approach for Self-healing Service-oriented Applications. In Proceedings of the Eighth International Conference on Management of Emergent Digital EcoSystems, MEDES '16, pages 1–8, 2016.
- [7] Rafael Angarita, Maude Manouvrier, and Marta Rukoz. An Agent Architecture to Enable Self-healing and Context-aware Web of Things Applications. In *Proceedings* of the International Conference on Internet of Things and Big Data, pages 82–87, 2016.
- [8] Rafael Angarita. Responsible Objects: Towards Self-Healing Internet of Things Applications. In Autonomic Computing (ICAC), 2015 IEEE International Conference on, pages 307–312, July 2015.
- [9] Rafael Angarita, Maude Manouvrier, and Marta Rukoz. A Framework for Transactional Service Selection Based on Crowdsourcing. In *Mobile Web and Intelligent Information Systems*, volume 9228 of *Lecture Notes in Computer Science*, pages 137–148. Springer International Publishing, 2015.
- [10] Rafael Angarita. Dynamic Composite Web Service Execution by Providing Fault-Tolerance and QoS Monitoring. In Service-Oriented Computing ICSOC 2014 Workshops and Satellite Events, Paris, France, November 3-6, 2014, pages 371–377, 2014.
- [11] Rafael Angarita, Yudith Cardinale, and Marta Rukoz. Dynamic Recovery Decision During Composite Web Services Execution. In *Proceedings of the Fifth International*

- Conference on Management of Emergent Digital EcoSystems, MEDES '13, pages 187–194, New York, NY, USA, 2013. ACM.
- [12] Marta Rukoz, Yudith Cardinale, and Rafael Angarita. FACETA\*: Checkpointing for Transactional Composite Web Service Execution based on Petri-Nets. Procedia Computer Science, 10(0):874 – 879, 2012.
- [13] Rafael Angarita, Yudith Cardinale, and Marta Rukoz. FaCETa: Backward and Forward Recovery for Execution of Transactional Composite WS. In *Proceedings of the Fifth International Workshop on REsource Discovery (RED 2012)*, pages 1–15, Heraklion, Grece, 2012.

#### National Conference

[14] Rafael Angarita, Yudith Cardinale, and Marta Rukoz. Mechanismos de Tolerancia a Fallas para la Ejecución de Servicios Web Compuestos Transaccionales. In Asociación Venezolana de Avances para la Ciencia (ASOVAC), 2012.

### Seminars and other presentations

- [15] Rafael Angarita. Leveraging the Service Bus Paradigm for Computer-mediated Social Communication Interoperability. *Inria's Junior Seminar, Inria Paris*, January 2017.
- [16] Rafael Angarita. La plateforme AppCivist-PB pour le budget participatif. *Première Journée Scientifique e-éducation, Inria Learning Lab, Inria Paris*, November 2017.
- [17] Rafael Angarita. Une approche auto-corrective pour des services composites transactionnels . *Ma thèse en 180 secondes, Université Paris-Dauphine*, April 2016.
- [18] Rafael Angarita. Ideas on Agent Architectures for Self-healing and Context-aware Web of Things Applications. *Université Paris Ouest Nanterre La Défense*, February 2016.
- [19] Rafael Angarita. An Approach for Self-healing Transactional Composite Service Execution. *LAMSADE*, *Université Paris-Dauphine*, July 2015.
- [20] Rafael Angarita. Fault-tolerant execution for composite Web services. *LAMSADE*, *Université Paris-Dauphine*, October 2013.

### Other Research Activities

**Program Committee (PC) member**, Software Systems, Models and Architectures track at the 6th IEEE International Conference on Future Internet of Things and Cloud (FiCloud 2018), August 2018.

**Program Committee (PC) member**, 3rd International Conference on Internet of Things, Big Data and Security (IoTBDS 2018), March 2018.

Reviewer, Journal: IET Software, December, 2017.

**Session Chair**, The 3rd IEEE International Conference on Collaboration and Internet Computing (CIC 2017)), October 2017.

**Reviewer**, The International Conference on Computer Science and Application Engineering (CSAE 2017), October 2017.

**Program Committee (PC) member**, Data and Knowledge Management track at the 5th International Conference on Future Internet of Things and Cloud (FiCloud 2017), August 2017.

**Program Committee (PC) member**, Software Architecture and Middleware track at the 5th International Conference on Future Internet of Things and Cloud (FiCloud 2017), August 2017.

**Reviewer**, *Journal: Knowledge and Information Systems*, January 2018, August 2017.

**Co-reviewer**, The 20th International Conference on Fundamental Approaches to Software Engineering (FASE), December 2016.

**Invited Researcher**, Social Apps Lab at CITRIS, University of California, Berkeley, Berkeley, USA. From 02/10/2016 to 21/10/2016.

**Session Chair**, The 6th annual Inria@SiliconValley Workshop: Berkeley-Inria-Stanford (BIS'2016), June 2016.

**Session Chair**, Parallel Session 6- Internet of Things (IoT) Applications and Internet of Things (IoT) Fundamentals, International Conference on Internet of Things and Big Data, April 2016.

Examiner, Journal: PLUS ONE, January 2015 and March 2015.

**Local Organization Committee**, 12th International Conference on Service Oriented Computing (ICSOC 2014), November 2014, Paris, France.

**Invited Researcher**, *University of Leicester*, Leicester, United Kingdom. From 17/09/2014 to 17/10/2014.

Summer School, LASER, ELBA, Italy. 2013.

#### Certifications

Sun Certified Programmer for the Java Platform, Standard Edition 6. Sun Certified Solaris Associate.

# Langages

English, Spanish, French.