Javier A. Espinosa-Oviedo

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Current Position

Since 09/2019   **Postdoctoral Researcher • Univ. Lyon 3 Jean Moulin • France**
Service Oriented Computing group

Since 2015   **Associate Researcher • CNRS French-Mexican Laboratory of Informatics and Automatic Control**, Database Management group

Since 2013   **Guest Researcher • Laboratory of Informatics of Grenoble • France**
Distributed Data Management Systems group

Employment Background

2018-2019   **Postdoctoral Researcher • Delft University of Technology • The Netherlands**
Leiden-Delft-Erasmus Centre for BOLD Cities, Fac. Architecture & the Built Environment
—Urban data management for disasters relief

2015-2017   **Postdoctoral Research Fellow • Barcelona Supercomputing Centre • Spain**
Extreme Computing group, Computer Science department
—Stream data processing for visualizing crowds moving in real-time in urban spaces

2013- 2015   **Postdoctoral Researcher • French-Mexican Laboratory of Informatics and Automatic Control** (UMI CNRS LAFMIA 3175) **• France**
—NoSQL solutions for handling Big Data Velocity and Variety

Educational Background

2009-2013   **PhD in Computer Science • University of Grenoble • France**
Dissertation: "Active Policy Based Reliable Data Services Coordinations" (viva: 28 October 2013). Jury: Samir Tata (president), Daniela Grigori (reviewer), Mohand-Saïd Hacid (reviewer), Khalid Belhajjame. Advisors: C. Collet, G. Vargas-Solar, J.L. Zechinelli-Martini.

2006-2008   **MSc in Computer Science • Universidad de las Américas, Puebla • Mexico**
Thesis: "C-Language: a language for defining contracts" (viva: 19 December 2008). Advisors: G. Vargas-Solar, J.L. Zechinelli-Martini.

2001-2006   **BE in Computer Systems Engineering • Universidad de las Américas, Puebla • Mexico**
Final project: "Taurus: Automatic service composition system for astronomical data applications" (viva: 14 July 2007). Advisor: J.L. Zechinelli-Martini.

Recognitions of Scientific Nature

2020 - 2024   **CNU Qualification**. Recognition of the French National Council of Universities (CNU) giving access to tenured positions at French universities.

2019 - now   **Member of the Mexican National System of Investigators** (SNI level C). Distinction awarded by the Mexican CONACyT after evaluation of candidate's scientific contributions by a scientist committee composed of recognized researchers.

2016 - now   **Regular member of the Mexican Academy of Computer Science** (AMEXCOMP). Membership granted after positive evaluation from the board.

Research Projects

PI = *Primary Investigator.*   TT = *Technological Transfer Project.*

SUMMIT
2019
TT
Multi-cloud services for the integration of heterogeneous data collections in multi-devices environments guided by SLA's. Funding body: Rhône-Alpes-Auvergne Region. Call reference: AAP Pack Ambition 2018. PI: Chirine Ghedira (Univ. Lyon 3). Period: 2019-2021.

SHARED-DATA
2019
PI
Urban Data Management for Disaster Relief in Cities. Funding body: LDE BOLD Cities Centre. Call reference: SHARED projects 2019-2023. PI: Javier Espinosa (TU Delft). Budget: 135K€

TRIPLE-A
2019
Stimulating the Adoption of low-carbon technologies by homeowners through increased Awareness and easy Access. Funding body: EU. Call reference: Interreg2seas-2016. PI: Vincent Gruis (TU Delft). Period: 2017-2020

IPGH
2017-2018
Building the history of climate change in Latin America. Funding body: IPGH. Call reference: PAT-2017. PI: Luis M. Vilches-Blázquez (U. Javeriana)

LINKSIUM
2018
TT
Technological transfer of the hybrid query engine HYPATIA in the context of IoT ecosystems. Funding body: SATT LINKSIUM Grenoble Alpes. PI: Genoveva Vargas-SOLAR (CNRS-LIG). Period: 02.05 - 30.09.2018

CONCERNS
2016-2017
PI
Dealing with Crowd Distress by Building Secure Immigration Corridors. Funding body: Microsoft Research, CONACyT. Call reference: Azure Data Science Awards 2016, CONACyT Postdoctoral Fellowship and mobility grants. PI: Javier Espinosa (BSC)

POLIWEB
2013-2014
Analyzing Big Data Collections Produced by Political Parties. Funding body: CNRS. Call reference: PEPS-2014. PI: Geraldine Castel (Stendhal University)

CASES
2012-2016
Customised Advisory Services for Energy-efficient Manufacturing Systems. Funding body: EU, Call reference: FP7-PEOPLE-2011-IRSES, PI: Weidong Li (U. Coventry)

S2EUNET
2010-2014
Security, Services, Networking and performance of next generation IP-based multimedia wireless Networks. Funding body: EU. Call reference: FP7-PEOPLE-2009-IRSES. PI: Prof. Frank Yong Li (UiA)

CLEVER 2011-2013	**Cloud-based Latin-American Environmental Virtual Observatory**. Funding body: CNRS-CAPES-ANII. Call reference: STIC-AmSud-2010, PI: Genoveva Vargas-Solar (CNRS)
OPTIMACS 2009-2012	**Service Composition Based Framework for Optimizing Queries.** Funding body: ANR. Call reference: ARPEGE-2008. PI: Genoveva Vargas-Solar (CNRS)
E-CLOUDSS 2008-2010	**Building E-Government Clouds Using Distributed Semantic Services.** Funding body: Microsoft Research. Call reference: LACCIR-RFP-2008. PIs: Regina Motz (UdelaR), Genoveva Vargas-Solar (CNRS), Martin Musicante (UFRN)
RED-SHINE 2009-2010	**Reliably and Semantically Integrating Web Information by Mashing-up Data Services.** Funding body: Grenoble INP. Call reference: BQR-2008/9. PI: Genoveva Vargas-Solar (CNRS)
ORCHESTRA 2007-2011	**Transactional Services Orchestration.** Funding body: ECOS–ANUIES. Call reference: ECOS-NORD-2017. PI: Christine Collet (Grenoble INP)
E-GROV 2007-2008	**Electronic Government Virtual Observatory.** Funding body: CONACyT-CUDI. Call reference: CUDI call 2007. PI: Jose Luis Zechinelli-Martini (UDLAP)

Research Stays Abroad

2015-2016   **Nanjing University of Aeronautics and Astronautics • China**
Period: 01.05 to 01.06.2015; 05.07 to 02.08.2015; 15.02 to 29.02.2016 (**3 months**).
Funding: EU FP7-PEOPLE-IRSES CASES project

Visiting researcher College of Mechanical and Electrical Engineering, with Prof. Dunbing Tang. During the stay we develop TigerFlow: a Service Based Flow Shop Simulator for the industry 4.0 (https://github.com/javieraespinosa/TigerFlow).

2014   **Institute Polytechnic of Turin • Italy**
Period: 25.05 to 24.06.2014 (**1 month**). Funding: EU FP7-PEOPLE-IRSES S2EUNET project.

Visiting researcher Internet Media Group (Computer Science department), were I worked in the analysis of big dataset of network data using Hadoop and produced teaching material for my course on Big Data Analytics.

2007-2008   **Laboratory of Informatics of Grenoble • France**
Period: 01.09.07 to 31.07.08 (**11 months**). Funding: CONACyT mobility grant

HADAS group Intern, where I developed activities in the context of service-oriented data management, related to my master thesis.

Scholarships and Grants

- **Azure Data Science Award** ($20,000 dlls) for cloud experimentation associated to own research projects. Funding body: Microsoft Research. Period covered: 2016-2017 (12 months).   **2016**

- **COST Trainee Grant** for the 2nd KEYSTONE Training School "Keyword search in Big Linked Data", at CiTIUS, University of Santiago de Compostela, Spain. Funding body:

European Cooperation in Science and Technology (COST). Period covered: 18 to 22.07.2016.

- **CONACyT Postdoctoral Fellowship** for conducting research activities on data intensive architectures at the Barcelona Supercomputing Centre, Spain. Period covered: 2015-2017 (24 months). **2015**

- **CONACyT scholarship for PhD studies** at University of Grenoble, France. Period covered: 2009-2013 (48 months). **2009**

- **CONACyT Mobility Grant for scientific internship in France** (CONACyT beca-mixta) at Laboratory of Informatics of Grenoble, France. Period covered: 2007-2008 (11 months). **2007**

- **CONACyT scholarship for master studies** at Universidad de las Américas, Puebla, Mexico. Period covered: 2006-2008 (24 months) **2006**

Languages

B=basic, G=good, P=proficiency

	Red	**Written**	**Spoken**	
Spanish	P	P	P	Mother tongue
French	P	P	G	TCF 2009: 490 pts, B2 level
English	G	G	G	TOEFL 2008: 575 pts

Associations

- Association for Computing Machinery (ACM)
- Mexican Academy of Computer Science (AMEXCOMP)

Licensed Software

- **HSTREAM: Big Stream Processing on IOT environments**.
Inventors:	G. Vargas-Solar, J.A. Espinosa-Oviedo, C. Collet
License holder:	Grenoble INP
Countries covered:	Europe
Granted date:	Procedure undergoing in the European Agency for the Protection of Programs (APP) www.app.asso.fr
Demo:	https://github.com/javieraespinosa/hstream

Publications

In computer science, some conferences are considered as important as indexed journals. When known, journal metrics and conference rakings are provided.

	Number	
Book chapters	2	

Peer-Reviewed Journal Articles	8	2 JCRs, 1 SJR Q1
Peer-Reviewed Conference Publications	7	3 CORE:A
Peer-Reviewed Workshops	5	
Articles without external evaluation	5	

Summary of publications

Book Chapters

1. **From Data Harvesting to Modelling and Prediction for Making Urban Territories Smart.** G. Vargas-Solar, A.S. Castillo-Camporro, J.L. Zechinelli-Martini, J. A. Espinosa-Oviedo. *Innovative Applications in Smart Cities. Advances in Smart Cities book series.* Taylor & Francis. — **InPress**

2. **Big continuous data: dealing with velocity by composing event streams**. G. Vargas-Solar, J. A. Espinosa-Oviedo, and J. L. Zechinelli-Martini. *Big Data Concepts, Theories and Applications*, pp. 1-27, Springer, 2016, ISBN: 978-3-319-27763-9, DOI: 10.1007/978-3-319-27763-9_1.
Citations (Scopus, 2019): 1 — **2016**

3. **Big Data Management: Challenges, Approaches, Tools and their limitations**. M. Adiba, J. C. Castrejón, J. A. Espinosa-Oviedo, G. Vargas-Solar, and J. L. Zechinelli-Martini. *Networking for Big Data*, pp. 43-55, CRC Press. ISBN: 978-1-4822-6349-7. — **2015**

Peer-Reviewed Journal Articles

1. **Analyzing digital politics: Challenges and experiments in a dual perspective.** G. Castel, G. Vargas-Solar, J. Espinosa-Oviedo. *Open Journal in Information Systems Engineering*, 2020, vol. 1, n° 3, ISTE OpenScience, ISSN: 2634-1468., DOI: 10.21494/ISTE.OP.2020.0533. — **2020**

2. **Using Autonomous Intelligence to Build a Smart Shop Floor**. D. Tang, K. Zheng, H. Zhang, Z. Zhang, Z. Sang, T. Zhang, J.-A. Espinosa-Oviedo, G. Vargas-Solar. *International Journal of Advanced Manufacturing Technology* vol. 94, issue 5-8, pp 1597–1606, 2018. ISSN:0268-3768. DOI: 10.1007/s00170-017-0459-y.
Impact Factor (JCR, 2017): 2.601
Impact Factor (CiteScore, 2018): 3.04
Impact Factor (SJR, 2017): 0.994
Quartile (SJR): Q1 Industrial and Manufacturing Eng.
Citations (Springer, 2019): 5 — **2018**

3. **πSOD-M: building SOC applications in the presence of non-functional requirements**. K. Belhajjame, V. de Castro, J. Espinosa-Oviedo, M. Musicante, U. Souza Da Costa, P. Souza Neto, G. Vargas-Solar and J.-L. Zechinelli-Martini. *International Journal of Web and Grid Services (IJWGS)*, vol.14 no.4, pp. 400-431, 2018. ISSN: 1741-1114. DOI:10.1504/IJWGS.2018.095660
Impact Factor (JCR, 2017): 1.071 (5-Year 0.853)
Impact Factor (SJR, 2018): 0.21
Quartile (SJR): Q3: Computer, Networks and Comm.

4. **Big data management: what to keep from the past to face future challenges?** G. Vargas-Solar, J. L. Zechinelli-Martini, and J. A. Espinosa-Oviedo. *Data Science and Engineering,* vol. 2, no. 328, pp. 328-345, 2017. ISSN: 2364-1541. DOI: 10.1007/s41019-017-0043-3
Impact Factor/Quartile: Not available yet
Citations (Springer, 2019): 8 — **2017**

5. **Modelling Crowds in Urban Spaces**. I. Rudomín, G. Vargas-Solar, <u>J. A. Espinosa-Oviedo</u>, H. Pérez, and J. L. Zechinelli-Martini. *Computación y Sistemas*, vol. 21, no. 1, pp. 57–66, 2017. ISSN: 1405-5546. DOI:<u>10.13053/CyS-21-1-2584</u>.
   Impact Factor (CiteScore, 2017): 0.53
   Impact Factor (SJR, 2017): 0.226
   Quartile (SJR): Q3: Computer Science
   Citations (Scopus, 2019): 1

6. **Humanitarian Logistics and Cultural Diversity within Crowd Simulation**. C. A. Ochoa Zezzatti, I. Rudomin, G. Vargas-Solar, <u>J. A. Espinosa-Oviedo</u>, H. Pérez, and J.-L. Zechinelli-Martini. *Computación y Sistemas*, vol. 21, no. 1, pp. 7–21, 2017. ISSN: 1405-5546. DOI:<u>10.13053/CyS-21-1-2583</u>.
   Impact Factor (CiteScore, 2017): 0.53
   Impact Factor (SJR, 2017): 0.226
   Quartile (SJR): Q3: Computer Science
   Citations (Scopus, 2019): 4

7. **Optimizing Data Processing Service Compositions Using SLA's**. G. Vargas-Solar, J.-L. Zechinelli-Martini, and <u>J.-A. Espinosa-Oviedo</u>. *Polibits*, vol. 53, pp. 65–75, 2016, ISSN: 1870-9044. DOI: <u>http://dx.doi.org/10.17562/PB-53-7</u>.
   CONACyT index (2019): C
   Quartile/area: Ciencia y Tecnología, Computación
   2016

8. **Reliable Web Services Composition: An MDD Approach**. G. Vargas-Solar, V. de Castro, P. A. de Souza Neto, <u>J. A. Espinosa-Oviedo</u>, E. Marcos, M. A. Musicante, J.-L. Zechinelli-Martini, and C. Collet. *Polibits*, vol. 49, no. 1, pp. 17-27, 2014. ISSN: 1870-9044.
   CONACyT index (2019): C
   Quartile/area: Ciencia y Tecnología, Computación
   2014

Peer-Reviewed Conference Publications

* 1. (Demo) **Demonstrating data collections curation and exploration with CURARE.** G. Vargas-Solar, G. Kemp, I. Hernandez Gallegos, <u>J-A. Espinosa-Oviedo</u>, C. Ferrera da Silva and P. Ghodous. In Proc. *22nd Int. Conf. on Extending Database Technology (EDBT'19): Demo session,* Lisbon, Portugal, March 26-29, 2019, pp. 598-601, OpenProceedings.org, 2019. ISBN: 978-3-89318-081-3. DOI: <u>10.5441/002/edbt.2019.65</u>.
   Conference Rank (2019): CORE:A, LiveSHINE:A, GGS:A MicrosoftAcademic:A+
   2019

2. (Poster) **Automating systematic mappings, adding quality to quantity**. R. Motz, G. Vargas-Solar, U. Souza Da Costa, <u>J. A. Espinosa-Oviedo</u>, Martin A. Musicante, J. L. Zechinelli-Martini, A. Pardo. In Proc. *39th Int. Conf. on Software Engineering (ICSE'17): Poster Track "Empirical Studies"*, Buenos Aires, Argentina, 20-28 May 2017, pp. 167-168, ISBN: 978-1-5386-1589-8, DOI: <u>https://doi.org/10.1109/ICSE-C.2017.111</u>
   2017

3. **Using Autonomous Intelligence to Build a Smart Shop Floor**. D. Tang, K. Zheng, H. Zhang, Z. Sang, Z. Zhang, C. Xu, <u>J. A. Espinosa-Oviedo</u>, G. Vargas- Solar, and J.-L. Zechinelli-Martini. In Proc. *9th Int. Conf. on Digital Enterprise Technology (DET'16)*, vol. 56, pp. 354–359, Elsevier, ISSN: 2212-8271, DOI: <u>https://doi.org/10.1016/j.procir.2016.10.039</u>
   Citations (Scopus, 2019): 1
   2016

4. **Comparing Electoral Campaigns by Analysing Online Data**. <u>J. A. Espinosa-Oviedo</u>, G. Vargas-Solar, V. Alexandrov, and G. Castel. In Proc. *Int. Conf. on Computational Science (ICCS'16)*, 6-8 June 2016, San Diego, California, USA, vol. 80, Elsevier, pp. 1865–1874. ISSN: 1877-0509. DOI: <u>10.1016/j.procs.2016.05.480</u>
   Conference Rank (2019): CORE:A, LiveSHINE:B, GGS: B
   Citations (Scopus, 2019): 1

* 5. (Poster) **Policy Driven Services Coordination for Building Social Networks Based Applications**. J. A. Espinosa-Oviedo, G. Vargas-Solar, J. L. Zechinelli-Martini, and C. Collet. In *Proc. Int. Conf. on Services Computing (SCC'11): Work in Progress Track*, 4-9 July 2011, Washington, DC, USA, IEEE, pp. 753-754. ISBN: 978-1-4577-0863-3, DOI: https://doi.org/10.1109/SCC.2011.40
Conference Rank (2019): CORE:A, LiveSHINE:A, GGS:A, MicrosoftAcademic:B
Citations (Scopus, 2019): 2 **2011**

* 6. (Poster) **Non-functional properties and services coordination using contracts**. J. A. Espinosa-Oviedo, G. Vargas-Solar, J.-L. Zechinelli-Martini, and C. Collet. In Proc. *13th Int. Database Engineering & Applications Symp. (IDEAS'19)*, 16-18 Sept. 2009, Cetraro, Italy, ACM, pp. 307-310. ISBN: 978-1-60558-402-7. DOI: https://doi.org/10.1145/1620432.1620467
Conference Rank (2019): CORE:B, LiveSHINE:B, GGS:B, MicrosoftAcademic:B-
Citations (ACM): 1 **2009**

7. **Securely coordinating services using contracts**. J. A. Espinosa-Oviedo, G. Vargas-Solar, J. L. Zechinelli-Martini, and C. Collet. In Proc. *IEEE Mexican Int. Conf. on Computer Science (ENC'09)*, Mexico City, Mexico, 21-25 Sept. 2009, pp. 307-314, ISBN: 978-1-4244-5258-3, DOI: https://doi.org/10.1109/ENC.2009.20
Conference Rank (2019): CORE:C, MicrosoftAcademic:C

8. **Construire des applications fiables à base de services mobiles.** A. Portilla, T. Hanh, J.A. Espinosa-Oviedo, C. Collet, G. Vargas-Solar. In Proc. of the 4th French-speaking conference on Mobility and ubiquity computing (UbiMob'08). Saint Malo, France, May 28-30, 2008, pp. 57-64, ACM, 2008. ISBN: 978-1-59593-980-7. DOI: 10.1145/1376971.1376983. **2008**

Peer-Reviewed Workshop Publications

* 1. **Measuring the Quality of Life in "La Condesa": Activating Mexico City Neighbourhood Economy while Maximising Well-being**. A.S. Castillo-Camporro, J.L. Zechinelli-Martini, J.A. Espinosa-Oviedo. In Service-Oriented Computing – ICSOC 2019 Workshops: WESOACS, ASOCA, ISYCC, TBCE, and STRAPS, Toulouse, France, October 28-31, 2019, pp. 213–223, LNCS, Springer, 2020. DOI: https://doi.org/10.1007/978-3-030-45989-5_17 **2020**

2. **Computing Query Sets for Better Exploring Raw Data Collections**. G. Vargas-Solar, J-L. Zechinelli-Martini and J-A. Espinosa-Oviedo. In Proc. *13th Int. Workshop on Semantic and Social Media Adaptation and Personalization (SMAP'18)*, Zaragoza, Spain, 6-7 Sept., 2018, IEEE, pp. 99-104. ISBN: 978-1-5386-8225-8. DOI: https://doi.org/10.1109/SMAP.2018.8501871
Conference Rank (2019): LiveSHINE:C **2018**

3. **Correlating digital footprints for discovering social connections in crowds**. J. Espinosa-Oviedo, G. Vargas-Solar, V. Alexandrov, J. Zechinelli-Martini. In Proc. *1st Int. workshop on Data Analytics solutions for Real-LIfe Applications (DARLI-AP'17) in conjunction with the 3rd Int. Conf. Smart Data*, Exeter, U.K., 21-23 Jun, 2017, IEEE, pp. 1130-1135, 2018, ISBN: 978-1-5386-3066-2 DOI: https://doi.org/10.1109/iThings-GreenCom-CPSCom-SmartData.2017.173 **2017**

4. **Unmarrying non-functional properties and services coordination using contracts**. J. A. Espinosa-Oviedo, G. Vargas-Solar, J. L. Zechinelli-Martini, and C. Collet. In Proc. *1st ACM Int. Workshop on Model Driven Service Eng. and Data Quality and Security (MoSE+DQS'09)*, Hong Kong, China, 6 Nov 2009, ACM, pp. 61-64, ISBN: 978-1-60558-816-2, DOI: https://doi.org/10.1145/1651415.1651427 **2009**

5. **Experiences in building reliable mobile services based applications**. Alberto Portilla, Hanh Tan, Javier-Alfonso Espinosa-Oviedo. In Proc. *1st Int. Workshop on Data and Services Management in Mobile Environments (DS2ME'08)* in conjunction **2008**

with the *24th Int. Conf. on Data Engineering (ICDE'08)*, April 7-12, 2008, Cancun, Mexico, IEEE, pp. 121-128. ISBN: 978-1-4244-2161-9, DOI: 10.1109/ICDEW.2008.4498303

Articles without External Evaluation

*	1.	(Abstract) **Building dynamic cards for monitoring building environments behavior and reconstruction in disasters: A data centric perspective.** G. Vargas-Solar, A. Koutamanis, J.A. Espinosa-Oviedo. *10th Conf. Int. Society for Integrated Disaster Risk Management (IDRiM'19)*, Nice, France, 16-18th October 2019.	**2019**
*	2.	**Supporting Real-Time Visual Analytics in Neuroscience**. E. Arriaga-Varela, J. A. Espinosa-Oviedo, G. Vargas-Solar, R. Dávila Pérez. In Book of abstracts *4th BSC Severo Ochoa Doctoral Symposium*, Barcelona, Spain, 2-4th May 2017, Barcelona Supercomputing Centre, pp. 71–72.	**2017**
*	3.	**Comparing electoral campaigns by analysing online data**. J.A. Espinosa-Oviedo, G. Vargas-Solar, V. Alexandrov, G. Castel. In Book of abstracts *3rd BSC International Doctoral Symposium*, Barcelona, Spain, 4-6th May 2016, Barcelona Supercomputing Centre, pp. 61-62.	**2016**
	4.	**Crowd simulation and visualization**. H. Perez, I. Rudomin, E. Ayguadé Parra, B. Hernandez, J. A. Espinosa-Oviedo, and G. Vargas-Solar. In Book of abstracts *3rd BSC International Doctoral Symposium*, Barcelona, Spain, 4-6th May 2016, Barcelona Supercomputing Centre, pp. 98–100	
	5.	**Efficient and versatile data analytics for deep networks**. D. Garcia-Gasulla, J. Moreno-Vázquez, J.A. Espinosa-Oviedo, J. Conejero, G. Vargas-Solar, R.M. Badia, U. Cortés, T. Suzumura. In Book of abstracts *3rd BSC International Doctoral Symposium*, Barcelona, Spain, 4-6th May 2016, Barcelona Supercomputing Centre, pp. 72-73.	

* Presented in conference

Teaching Experience

All teaching material is available at http://espinosa-oviedo.com/teaching.

Type	Institution	Country	Total Hours
Master	UPMF	France	66
Master	UdelaR	Uruguay	45
Master	Grenoble INP	France	28
Undergraduate	UPMF	France	6
Undergraduate	IUT1 Grenoble	France	20
Tutorial	BSC	Spain	19
Tutorial	ISUM'18 Conference	Mexico	12
Tutorial	2nd FR-BR School on Smart Cities	Brazil	3

Summary. Total volume of teaching activities per institutions

Courses

Institution	Course	Program	Year	Students	Hours
Barcelona Supercomputing Centre • Spain	**Big Data Visualization**	Big Data Analytics PRACE Advance Training program	2018	45	5P
			2017	47	7P
			2016	23	4P
	Big Data Management		2017	41	8P
			2016	27	8P

Grenoble INP • France		Master Electrical engineering for Smart Grids and Buildings, ENSE3[1]	2015	32	8P
		3rd year engineering school ENSIMAG[2]. Big Data track	2014	20	6P
			2013	42	6P
UdelaR • Uruguay	**Big Data Analytics and Visualization**	Master Pedeciba-Informática, Computer Science Institute	2016	7	10T+10P
	Big Data Analytics		2015	13	10T+10P
			2014	27	15P
IUT1 Grenoble • France	**Development of Mobile and Web Service Applications**	Licence Professionnelle Réseaux et Télécommunications**.** Spécialité Services Mobiles et Interface Nomad	2015	12	10T+10P
UDLAP • Mexico	**Big Data Visualization**	Supercomputing Education Program	2016	15	4P
UPMF • France	**Languages and Technologies of the Web 2**	Master 1, IC2A[3] program, WIC[4] track	2015	32	6T+12P
			2014	30	6T+12P
	Introduction to Web Technologies	Licence 3, MIASHS[5] program	2014	6	4T+2P
	Digital Multimedia	Master 2, IC2A program, WIC track	2013	15	12T+12P

T/P = Theory/Practice

Tutorials (single edition)

Course	Event	Year	Students	Hours
Data Processing and Querying at Scale using Big Data Analytics Stacks	9th International Supercomputing Conference in Mexico (ISUM'18), 3-6th March 2018, Merida, Mexico.	2018	7	12P
Visualizing Big Urban Data	2nd French-Brazilian School on Big Data & Smart Cities. 8-10th Nov. 2017, Natal, Brazil.	2017	30	3P
Scientific Visualization of Big Data	3rd BSC Int. Doctoral Symposium, 4-6th May 2016, Barcelona, Spain	2016	10	3P

Students Mentoring

	PhD	Master	Undergraduate

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[1] École Nationale Supérieure de l'Énergie, l'Eau et l'Environnement
[2] École Nationale Supérieure d'Informatique et Mathématiques Appliquées
[3] Ingénierie de la Cognition, de la Création et des Apprentissages
[4] Web, Informatique et Connaissance
[5] Mathématiques et Informatique Appliquées aux Sciences Humaines et Sociales

Students	1	8	9
Implication	50%	2 x 70% 2 x 45% 3 x 30% 1 x 50%	9 x 70%

PhD

- (Undergoing) MEHRDAD FAROKHNEJAD. **Defining human guided data collections exploration for modelling complex systems: supporting urban spaces design**. University of Grenoble-Alpes. Mentors: G. Vargas-Solar, J. Espinosa (**involvement 50%**). Funded by the National Council of Science and Technology of Iran.

Master

- (Undergoing) HUGO SANTILLAN VILLICAÑA. **Integration of medical data in multi-cloud environments guided by SLAs**. Universidad Autónoma de Guadalajara, 2019. Mentors: G. Vargas-Solar, J. Espinosa (**involvement 50%**).
- IRIS RUYSCH. **Paving the way for autonomous cars: Current projects and challenges in the Netherlands**. Delft University of Technology, 2019. Mentors: A. Ersoy, J. Espinosa (**involved 70%**).
- MAYSAA KHALIL. **GREENHOME: Household Energy Consumption & Co2 Footprint Metering Environment**. ENSE3-Grenoble INP. Supervisors: G. Vargas-Solar, R. Caire, J. Espinosa (**involvement 30%**).
- IRVING HERNANDEZ GALLEGOS. **Data collections curation and exploration with CURARE**. Universidad Autónoma de Guadalajara, 2018. Mentors: G. Vargas-Solar, J. Espinosa (**involvement 30%**).
- SANTIAGO RUÍZ ANGULO. **Analysis of climate change in LATAM by processing historical newspapers**, Universidad Autónoma de Guadalajara, 2017. Mentors: R. Davila, G. Vargas-Solar, J. Espinosa (**involvement 45%**). https://github.com/javieraespinosa/ipgh-lab
- ENRIQUE ARRIAGA VARELA. **Discovering patterns from streams for supporting real-time decision-making during neuroscience experiments**. Universidad Autónoma de Guadalajara, 2017. Mentors: R. Davila, G. Vargas-Solar, J. Espinosa (**involvement 45%**). https://github.com/javieraespinosa/hstream
- PEDROPABLO LOPEZ AMAYA. **Collection and storage of transport data** (Acquisition et stockage des données du transport), Université Claude Bernard Lyon 1, 2015. Mentors: F. Da Silva, P. Ghodous, G. Vargas-Solar, J. Espinosa (**involvement 30%**).
- XIAOHU TANG, **TigerFlow: a smart Shop Floor simulator for the Industry 4.0**. University of Nanjing, China. Mentors: G. Vargas-Solar, J. Espinosa (**involvement 70%**). https://github.com/javieraespinosa/TigerFlow

Undergraduate

- CLÉMENT QUÉRÉ. **Analyzing Gender Gap in Stem**. IUT Lannion, 2019. Mentors: L. D'Orazio, K. Gibert, G. Vargas-Solar, J. Espinosa (**involvement 50%**).
- HÉLÈNE BESANÇON, SYLVAIN BOUVET, CLÉA BROSSARD, THIBAUT FOURRIER. **Collection and storage of online data produced during the 2014 European Elections**. Projet de spécialité, ENSIMAG, Grenoble INP, 2014. Mentors: G. Vargas-Solar, J. Espinosa (**involvement 70%**).
- OCEANE DE LOITIERE, BASTIEN DROCOURT, MANON LUCAS. **System for exploring the 2014 European Elections collected data**. Projet de spécialité, ENSIMAG, Grenoble INP, 2014. Mentors: G. Vargas-Solar, J. Espinosa (**involvement 70%**).
- VAELLO TORREGROSA BRAULIO. **Building a mashup environment for integrating data services**. ENSIMAG, Grenoble INP, 2011. Mentors: G. Vargas-Solar, J. Espinosa (**involvement 70%**).

Program Committee	*STRAPS 2020*: 2nd Workshop on Smart Data Integration and Processing on Service based environments (in conjunction with ICSOC 2020) *CoopIS 2019*: 27th Int. Conf. on Cooperative Information Systems *DSC 2019*: 5th IEEE Int. Workshop for Data Science and Computing (in conjunction with AICCSA 2019) *DARLI-AP 2019 & 2020*: 3rd and 4th Data Analytics solutions for Real-LIfe Applications (in conjunction with EDBT/ICDT 2019 & 2020)

Reviewer

Journals
- Transactions on Emerging Topics in Computing (2019)
- Future Generation Computer Systems (2020, 2019)
- Information Systems Frontiers (2019)
- Computing (2018, 2019)
- Computación y Sistemas (2016, 2018)
- Data in Brief (2017)

Conferences
- AICCSA (2016, 2019),
- ADBIS DaS workshop (2017)
- ICCS (2017)
- MICAI (2016)
- IKC KEYSTONE (2016)
- ENC (2010, 2009)

Conference Organization
- *BDA Summer School "Masses de données distribuées"*
  - 6th ed. 7-12 June 2020, Corse, France
  - 5th ed. 17-22 June 2018, Aussois, France
- *Franco-Brazilian Spring School on Big Data and Smart Cities*
  - 1st ed. 7-10th April 2015, Grenoble, France
  - 2nd ed. 8-10th November 2017, Natal, Brazil
- *EDBT Summer School 2013 on Big, Linked and Open Data*, 1st-6th September 2013, Aussois, France.

Other Services
- Project manager, LAFMIA lab (since 2015)
- Main organizer and chairperson, LDE BOLD Cities Talks (2018-2019)
- Main organizer, Collaborative Workshop UAG-UdeG and BSC (2017)
- Chair, 4th BSC Doctoral Symposium, 2017
- Main organizer, Seminar on Web Service, LIG-Sinergy (2010)