

CURRICULUM VITAE

Coquimbo, January 30, 2024

Personal data

	Name:	Daniel Gustavo San Martín Santibáñez
	Phone:	+56 956319019
	E-mail:	daniel dot sanmatin at ucn dot cl
	Address:	Calle Las Loicas 1952, Coquimbo
	WWW:	danielsanmartin.cl
	:	www.linkedin.com/in/dgsmss/
	:	shorturl.at/gkow4

Education

Federal University of São Carlos, Brazil	2016 – 2021
PhD in Computer Science, thesis: <i>REMEDY: Architecture Conformance Checking for Adaptive Systems</i>	
Federal University of São Carlos, Brazil	2011 – 2013
Msc Computer Science. Dissertation: <i>Concern Mining in the Architecture-Driven Modernization Process</i>	
Catholic University of the North, Chile	1999 – 2008
BS in Computer Engineering. Thesis: <i>A Study of Process Management Using BPMI Standard: Modeling and Executing Business Processes</i>	

Internships

University of Concepción	June-October 2022
Professional Certificate Program in Artificial Intelligence	
Federal University of Rio de Janeiro, Professor D.Sc. Guilherme Travassos	May 2018
PhD Student. FAPESP (Process Number 2016/03104 – 0)	

Publications

1. Guisella Angulo, Daniel San Martín, Fabiano Ferrari, Ignacio García-Rodríguez de Guzmán, Ricardo Pérez-Castillo, and Valter Vieira de Camargo. A process for creating kdm2psm transformation engines. *International Journal on Software Tools for Technology Transfer*, Jan 2024.
2. Paul Leger, Hiroaki Fukuda, Nicolás Cardozo, and Daniel San Martin. Exploring a self-replication algorithm to flexibly match patterns. *IEEE Access*, pages 1–1, 2024.
3. Daniel Santibanez, Guisella Angulo, and Valter V. de Camargo. Architecture conformance checking in kdm-represented adaptive systems (submitted). *Journal of Software Engineering Research and Development*, 2023.
4. André Landi, Daniel Santibanez, Bruno M. Santos, Warteruzannan S. Cunha, Rafael S. Durelli, and Valter V. de Camargo. Architectural conformance checking for kdm-represented systems. *Journal of Systems and Software*, 2022.
5. Daniel San Martín and Valter Camargo. A domain-specific language to specify planned architectures of adaptive systems. In *15th Brazilian Symposium on Software Components, Architectures, and Reuse*, SBCARS '21, page 4150, New York, NY, USA, 2021. Association for Computing Machinery.
6. Daniel San Martín, Guisella Angulo, Bruno Marinho, Raphael Honda, and Valter Camargo. Specification and use of concern metrics for supporting modularity-oriented modernizations. *Software Quality Journal*, 28(3):1087–1111, Sep 2020.

7. D. S. Martín, B. Siqueira, V. V. de Camargo, and F. Ferrari. Characterizing architectural drifts of adaptive systems. In *2020 IEEE 27th International Conference on Software Analysis, Evolution and Reengineering (SANER)*, pages 389–399, 2020.
8. Bruno Santos, Daniel San Martín, Raphael Honda, and Valter Vieira de Camargo. Concern metrics for modularity-oriented modernizations. In Mario Piattini, Paulo Rupino da Cunha, Ignacio García Rodríguez de Guzmán, and Ricardo Pérez-Castillo, editors, *Quality of Information and Communications Technology*, pages 225–238, Cham, 2019. Springer International Publishing.
9. Bruno M. Santos, André de S. Landi, Daniel S. Santibáñez, Rafael S. Durelli, and Valter V. de Camargo. Evaluating the extension mechanisms of the knowledge discovery metamodel for aspect-oriented modernizations. *Journal of Systems and Software*, 149:285–304, 2019.
10. Bento R. Siqueira, Misael Costa Júnior, Fabiano C. Ferrari, Daniel S. M. Santibáñez, Ricardo Menotti, and Valter V. Camargo. Experimenting with a multi-approach testing strategy for adaptive systems. In *Proceedings of the 17th Brazilian Symposium on Software Quality*, SBQS, page 111120, New York, NY, USA, 2018. Association for Computing Machinery.
11. Guisella Angulo, Daniel San Martín, Bruno Santos, Fabiano Cutigi Ferrari, and Valter Vieira de Camargo. An approach for creating kdm2psm transformation engines in adm context: The rute-k2j case. In *Proceedings of the VII Brazilian Symposium on Software Components, Architectures, and Reuse*, SBCARS 18, page 92101, New York, NY, USA, 2018. Association for Computing Machinery.
12. Daniel Santibanez and Valter V. de Camargo. Remodularizing Adaptive Systems by Employing Architecture-Driven Modernization Principles. In *VII Workshop de Teses e Dissertações do CBSOFT (WTDSOFT 2017)*, 09 2017.
13. Daniel San Martín Santibáñez, Rafael Serapilha Durelli, and Valter Vieira de Camargo. A combined approach for concern identification in kdm models. *Journal of the Brazilian Computer Society*, 21(1):10, Aug 2015.
14. R. S. Durelli, D. S. M. Santibáñez, M. E. Delamaro, and V. V. de Camargo. Towards a refactoring catalogue for knowledge discovery metamodel. In *Proceedings of the 2014 IEEE 15th International Conference on Information Reuse and Integration (IEEE IRI 2014)*, pages 569–576, Aug 2014.
15. R. S. Durelli, D. S. M. Santibáñez, B. Marinho, R. Honda, M. E. Delamaro, N. Anquetil, and V. V. de Camargo. A mapping study on architecture-driven modernization. In *Proceedings of the 2014 IEEE 15th International Conference on Information Reuse and Integration (IEEE IRI 2014)*, pages 577–584, Aug 2014.
16. Victor Hugo Santiago C. Pinto, Valter Vieira de Camargo, and Daniel S. Martín Santibáñez. Identifying subdomains of multiple-domain frameworks. In *Proceedings of the XVII Iberoamerican Conference on Software Engineering, CIbSE 2014, Pucon, Chile, April 23-25, 2014*, pages 27–40, 2014.
17. Rafael S. Durelli, Daniel S. M. Santibáñez, Nicolas Anquetil, Márcio E. Delamaro, and Valter Vieira de Camargo. A systematic review on mining techniques for crosscutting concerns. In *Proceedings of the 28th Annual ACM Symposium on Applied Computing*, SAC 13, page 10801087, New York, NY, USA, 2013. Association for Computing Machinery.
18. Daniel Santibáñez, Valter Camargo, Rafael Durelli, and Bruno Marinho. A combined approach for concern identification in kdm models. In *7th Latin American Workshop On Aspect-Oriented Software Development: Advanced Modularization Techniques (LA-WASP 2013)*, 09 2013.
19. Daniel Santibanez, Rafael S. Durelli, Bruno Marinho, and Valter V. de Camargo. CCKDM - A Concern Mining Tool for Assisting in the Architecture-Driven Modernization Process. In *Session Tools - CBSOFT (Congresso Brasileiro de Software)*, 09 2013.

Teaching

Teaching in Computer Engineering, Catholic University of the North

II-2023

- ▶ Software Engineering;
- ▶ Software Patterns and Programming.

Teaching in Computer Engineering and Bachelor of Science (Education) in Mathematics and Computer Science, University of Los Lagos

I-2023

- ▶ Software Engineering II;
- ▶ Algorithms and Computational Complexity;
- ▶ Web Development with Django;
- ▶ Mathematical and Computational Thinking.

Teaching in Computer Engineering, University of Los Lagos

I - II-2022

- ▶ Software Engineering;
- ▶ Algorithms and Computational Complexity;
- ▶ Information Systems;
- ▶ Practical Programming.

Teaching in Computer Engineering, University of Los Lagos

II-2021

- ▶ Software Engineering;
- ▶ Information Systems;
- ▶ Discrete Structures;
- ▶ Algorithms and Computational Complexity.

Teaching in Computer Engineering, University of Los Lagos

I-2021

- ▶ Software Engineering;
- ▶ Data Structures;
- ▶ Algorithms and Computational Complexity;
- ▶ JEE Application Development.

Teaching in Computer Engineering, University of Los Lagos

II-2020

- ▶ Process Control Systems;
- ▶ Computer Architecture;
- ▶ Software Engineering II;
- ▶ Domain-Specific Languages.

Teaching in Computer Engineering, University of Los Lagos

I-2020

- ▶ Software Engineering;
- ▶ Systems Engineering;
- ▶ Software Architecture.

Supervision

Undergraduate Thesis: Nicolás Quintraman

I y II-2023

- ▶ Title:
IoT Architecture for Household Drinking Water Consumption

Undergraduate Thesis: Diego Canquil

I y II-2023

- ▶ Title:
Predictive Model for Household Drinking Water Consumption

Undergraduate Thesis: Matías Muñoz - Fabián Almonacid

I y II-2022

- ▶ Title:
Comparison of Frameworks for the Development of Self-Adaptive Systems
in the Context of Cybersecurity.

Undergraduate Thesis: Gianfranco Maiocchi Sube

I y II-2021

- ▶ Title:
Development of an Automated Functional Testing Strategy on Cloud
Platforms: ULagos Library, a Case Study

💼 Experience

Assistant Professor @ Universidad Católica del Norte	08.2023 – till the date
Assistant Professor, Level A @ Universidad de los Lagos	03.2020 – 07-2023
Chief Information Security Officer @ Universidad Austral de Chile	08.2014 – 02.2016
SCRUM Master @ Innovex, Chile	10.2013 – 07.2014
Project Manager @ Grupo CEPECH, Chile	03.2010 – 02.2011
Analyst @ Quanam, Chile	08.2009 – 02.2010
Technical Consulting @ Instituto Nacional de Estadísticas, Chile	10.2008 – 07.2009
Support Engineer @ NorteWeb, Chile	07.2008 – 09.2008

👤 Conferences**Conference: “CBSOFT 2021, Online”**

2021

- ▶ Talk: A domain-specific language to specify planned architectures of adaptive systems

Conference: “CBSOFT 2018, São Carlos , Brazil”

2018

- ▶ Talk: An approach for creating kdm2psm transformation engines in adm context: The rute-k2j case

Conference: “CBSOFT 2017, Fortaleza, Brazil”

2017

- ▶ Talk: “Remodularizing Adaptive Systems by Employing Architecture-Driven Modernization Principles”

Conference: “8.8 Ciberseguridad, Santiago”	2015
► Talk Attendee.	
Conference: “CibSE 2014, Pucón, Chile”	2014
► Talk: “Identifying Subdomains of Multiple-Domain Frameworks”	
Conference: “CBSoft 2012, Natal, Brazil”	2012
► Poster: “A Systematic Review on Mining Techniques for Croscutting Concerns”	
Conference: “Jornadas Chilenas de la Computación, Iquique, Chile”	2007
► Asistente.	
Conference: “Encuentros Linux”	2007
► Asistente en las versiones de Valparaíso (2004), Talca (2005) e Iquique (2006).	



Scholarships, grants

CONICYT PFCHA/DOCTORADO BECAS CHILE/2016 - 72170024	2016 – 2020
OEA - CAPES, Phd Studies, Brazil	2016
CAPES, Master Studies, Brazil	2012 – 2013
VII Latin American Workshop on Aspect-Oriented Software Development (LA-WASP), Brasilia	2013
• Best paper and invited to submit to The Journal of the Brazilian Computer Society	
CNPQ, Master Studies, Brazil	2011 – 2012



Skills

Programming Languages: Python, C/C++, Java, OCL, R-statistics, Bash, L^AT_EX

Operating systems: Windows , Linux

Tools: Eclipse, Android Studio, GitHub, UML, BPMN, SonarGraph, SonarQube.