# Curriculum Vitae - C.D.N. (Diego) Damasceno

#### Personal Information

Full Name Carlos Diego Nascimento Damasceno (he/him)

Personal Details Available Upon Request

Homepage http://damascenodiego.github.io/

Linkedin https://linkedin.com/in/damascenodiego

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#### SUMMARY

Creative software engineer with exceptional testing skills and over a decade of experience in software research and development. Collaborated with experts in various areas, including artificial intelligence, mathematical optimization, software architecture, and education informatics. Experienced with software modeling, software testing, and software variability.

#### EDUCATION

05/2016-07/2020 PhD, Computer Science and Computational Mathematics

University of São Paulo (ICMC-USP), São Carlos, BR

Thesis: Learning finite state machine models from evolving systems

Advisor: Adenilso da Silva Simão Co-Advisor: Mohammad Reza Mousavi

04/2020-12/2021 MBA, Project Management

University of São Paulo (USP/Esalq), Piracicaba, BR

Thesis: Best practices for artifact quality management in software

engineering research

Advisor: Isotilia Costa Melo

02/2014-05/2016 MSc, Computer Science and Computational Mathematics

University of São Paulo (ICMC-USP), São Carlos, BR

Thesis: Evaluating finite state machine-based testing methods on

RBAC systems

Advisor: Adenilso da Silva Simão

03/2008-01/2014 BSc, Computer Science

Federal University of Pará (UFPa), Belém, BR

# Professional Experiences

06/2023-Current ASML, Veldhoven, NL

Position: Software Engineer - Model-Based Testing Methodologies

- Developing modeling methodologies for capturing variation in data, flow & configurations
- Developing model-based testing methodologies to the semiconductor domain
- Enabling collaboration between experts from different domains

#### 12/2020-05/2023 Radboud University, Nijmegen, NL

Position: Postdoctoral Researcher in Software Science Project: Model-/Search-based Software Engineering Supervisor: Frits W. Vaandrager and Daniel Strüber

- Developed research and education activities in model-based testing, automata learning, and product-line engineering
- Investigated quality and project management principles to support research artifact creation and evaluation
- Worked on teaching and supervising BSc and MSc students

# 03/2020-11/2020

# Postgraduate Program in Computing Applied to Education (CAE-USP), Sao Carlos, BR

Position: Student Supervisor and Online tutor

Supervisor: Seiji Isotani and Patrícia Jaques Maillard

Project: Educational Data Mining and Scientific Writing and Methodology

- Supervised six students developing term papers on Educational Data Mining
- Produced educational content in video format for a module on Scientific Writing and Methodology in Informatics in Education.
- Published one journal paper on mining association rules from educational data

#### 11/2018-12/2019

# University of Leicester, Leicester, UK

Position: Visiting PhD Student Researcher

Project: Learning state machines of evolving systems

Supervisor: Mohammad Reza Mousavi

- Designed and developed theories and tools to capture behavior variability and evolution
- Experimented with model-based approaches to analyze behavioral and data variations in cyber-physical systems
- Collaborated in the customization of an open-source autonomous driving simulator for science outreach activities
- Mediated science outreach activities with experts in artificial intelligence and autonomous vehicles
- Published four papers in peer-reviewed events, including conferences, artifacts, and workshops

# 10/2012-07/2013

# Siemens Corporate Research, Princeton, NJ, USA

Position: Software Engineering Intern

Project: Tedeso – an extensible model-based testing platform

- Gained experience with model-based testing, Eclipse RCP/GEF, TDD, and Junit
- Contributed to testing, bug fixes, and new features development
- Developed and integrated model-based methodologies for functional and performance testing

# 08/2009-12/2009

# Fortalecer Project

Position: Intern

Location: Federal University of Pará (UFPa) Supervisor: Janne Yukiko Yoshikawa Oeiras

- Gained experience with PHP programming in the Moodle framework
- Teaching algorithms to middle school students

#### TEACHING EXPERIENCES

08/2022-01/2023 Radboud University (ICiS)

Role: Co-Lecturer

Course: Software Product Lines (NWI-IMC059)

Coordinator: Daniel Strüber

01/2022-08/2022 Radboud University (ICiS)

Role: Co-Lecturer and Assignment Grading Course: Software Engineering (NWI-IBI001)

Coordinator: Cynthia Kop

08/2021-01/2022 Radboud University (ICiS)

Role: Co-Lecturer

Course: Software Product Lines (NWI-IMC059)

Coordinator: Daniel Strüber

12/2020–01/2021 Radboud University (ICiS)

Role: Exam Invigilator

Course: Software Product Lines (NWI-IMC059)

Coordinator: Daniel Strüber

03/2020-04/2020 University of São Paulo (ICMC-USP)

Role: Online tutor

Course: Scientific Writing and Methodology in Informatics in Educa-

tion (78744)

Supervisor: Patrícia Jaques Maillard

07/2017-11/2017 University of São Paulo (ICMC-USP)

Role: Teaching Assistant

Course: Software Engineering for Embedded Systems (SSC0720)

Supervisor: Adenilso da Silva Simão

02/2017-06/2017 University of São Paulo (ICMC-USP)

Role: Teaching Assistant

Course: Methods for Analysis and Design of Reactive Systems (SSC0722)

Supervisor: Adenilso da Silva Simão

07/2016–11/2016 University of São Paulo (ICMC-USP)

Role: Teaching Assistant

Course: Software Engineering for Embedded Systems (SSC0720)

Supervisor: Adenilso da Silva Simão

07/2015–11/2015 University of São Paulo (ICMC-USP)

Role: Teaching Assistant

Course: Programming Languages and Applications (SSC0300)

Supervisor: Adenilso da Silva Simão

02/2015–06/2015 University of São Paulo (ICMC-USP)

Role: Teaching Assistant

Course: Object-oriented programming (SSC0103)

Supervisor: Adenilso da Silva Simão

# ACADEMIC EXPERIENCES

# 12/2020-05/2023 Department of Software Science (SwS)

Position: Postdoctoral Researcher

Location: Radboud University Nijmegen

Topics: Search-/Model-Based Software Engineering Supervisor: Daniel Strüber and Frits W. Vaandrager

- Research in the areas of model-based testing, search-based software engineering, model-driven engineering, and software product lines
- Supervised one master's thesis and two research internships
- Co-authored eight peer-reviewed articles published in conferences and workshops
- Gained experience in teaching at BSc and MSc courses

## 11/2018–12/2019 Validation and Verification Group (VALVE)

Position: Visiting PhD Student Researcher

Location: University of Leicester

Topics: Software Engineering, Model-Based Testing

Supervisor: Mohammad Reza Mousavi

- Developed research work in the areas of model learning and software product lines
- Gained experience in science outreach activities
- Collaborated with AI experts in customizing an open-source driving simulator for science outreach activities
- Supervised two student interns in projects on web design and GUI programming

# 02/2014-07/2020 Software Engineering Lab (LabES/ICMC-USP)

Position: MSc and PhD Student Researcher Location: University of São Paulo (ICMC-USP) Topics: Software testing, Formal methods

- Supervisor: Adenilso da Silva Simão
  - Acquired expertise in software engineering, formal methods, model learning, and software product lines
  - Collaborated with experts in systems-of-systems and education informatics
  - Prototyped tools using Java, Python, R, and C/C++
  - Worked as a teaching assistant in 5 courses at BSc level
  - Supervised six postgraduate students developing projects on Educational Data Mining

# 10/2013-12/2013 Software Engineering Laboratory (LabES/UFPa)

Position: Scientific Initiation Fellow

Location: Federal University of Pará (UFPa)

Topics: Software Engineering Supervisor: Cleidson de Souza

- Collaborated on brainstorming applications of model-based testing in mining
- Worked on a presentation about model-based testing for researchers and experts in mining

#### Laboratory of Computational Intelligence (LINC) 08/2011-07/2012

Position: Scientific Initiation Fellow

Location: Federal University of Pará (UFPa) Topics: Data mining in Bioinformatics

Supervisor: Adamo Santana / Fabio Lobato

- Developed research work at the intersection of data mining and bioinformatics
- Gained experience with C/C++, Python, data structures, Linux, scientific writing, and benchmarking
- Co-authored one conference paper introducing a technique for pre-processing DNA sequencing data.

#### 05/2010-11/2010 High Performance Network Planning Laboratory (LPRAD)

Position: Scientific Initiation Fellow

Location: Federal University of Pará (UFPa) Topics: Similarity functions, Data pre-processing Supervisor: Adamo Santana / Fabio Lobato

- Developed a tool prototype for data pre-processing based on string similarity metrics
- Gained experience with Java, GUI programming, Linux, similarity metrics, and scientific writing
- Authored one workshop paper presenting a tool for string normalization using similarity metrics

# SKILLS AND TECHNIQUES

#### Programming:

- Java
- Python
- Bash
- C/C++

### Tools:

- Git.
- Jenkins
- TDD
- OOP
- UML
- Linux
- Windows
- VirtualBox

#### Engineering:

• Data structures

- Algorithms
- Testing
- Refactoring
- Variability
- Debugging

#### Libraries/Frameworks:

- LearnLib
- FeatureIDE
- Commons Math
- Commons CLI
- NetworkX
- Eclipse RCP
- JUnit

## IDEs/Editors:

- Eclipse
- IntelliJ
- PyCharm

- VSCode
- Vim
- LaTeX
- MS Office

## Soft skills:

- Communication
- Teamwork
- Problem solving
- Adaptability
- Analytical thinking

#### Academic:

- Scientific writing
- Experiment Design
- Literature Reviews
- Project Management
- Teaching
- Student Supervision

# **Supervised Students**

2023 Monteban, G. (Gianni), Master's specialization: Software Science,

Radboud University. Project: Designing Techniques for Family-Based

Fingerprinting. Graduated: April 2023.

2021 van Arragon, L. (Lars), Master's specialization: Software Science,

Radboud University. Project: Towards Improving the Performance of Model Driven Optimisation: From Domain Models to Low-Level

Encodings and Back. Graduated: Dec 2021.

2020 Ricardo Dias Pacheco Martins, Postgraduate Specialization in Computing Applied to Education, CAE-USP. Project: Educational data mining to predict the academic performance of physics students through-

out high school (in pt-BR). Graduated: Dec 2020.

Mayk Fernando Choji, Postgraduate Specialization in Computing Applied to Education, CAE-USP. Project: Enade data mining from 2016 to 2018: an analysis of the Araçatuba (SP) municipality (in pt-BR).

Graduated: Dec 2020.

Luciana Passos da Silva, Postgraduate Specialization in Computing Applied to Education, CAE-USP. Project: Study on the perception of undergraduates about aspects that contributed to their comprehensive training, in face-to-face higher technology courses (in pt-BR). Graduated: Dec 2020.

Daniel Rodrigues Corrêa, Postgraduate Specialization in Computing Applied to Education, CAE-USP. Project: The experience of adapting students from on-site courses to online teaching applied during the pandemic period caused by COVID-19, at Unifacisa - Campina Grande, PB (in pt-BR). Graduated: Dec 2020.

Carla Costa de Freitas Soares, Postgraduate Specialization in Computing Applied to Education, CAE-USP. Project: Extracurricular factors and the quality of education in the state network in São Paulo (in pt-BR). Graduated: Dec 2020.

Alessandro Aparecido Barcellos, Postgraduate Specialization in Computing Applied to Education, CAE-USP. Project: Open Data Mining - ENEM 2018 (in pt-BR). Graduated: Dec 2020.

#### Supervised Research Internships

2023 Derksen, S.A.G. (Sjors), Master's specialisation: Software Science,

Radboud University. Project Title: Search-Based Frequent Subtree Mining - A Case Study of Patterns in Cross-Tree Constraints. Com-

pleted: April 2023.

2022 Monteban, G. (Gianni), Master's specialisation: Software Science, Radboud University. Project Title: Benchmarking SMT solvers and opti-

mizing SMT within the LTSDiff algorithm. Completed: Aug 2022.

# Member of Examination Boards

2020

Patrícia Takaki Neves, Postgraduate Specialization in Computing Applied to Education, CAE-USP.

# **PUBLICATIONS**

#### Overview

Publication type	Total	First author	As supervisor	Awards
Journal Papers	4	2	1	
Conference Papers	13	5	2	3
Workshop Papers	6	5	1	
Research Artifacts	3	2		
Technical Reports	2			
Non-Peer Reviewed	1			
Thesis	3	3		
Total	32	18	4	3

Table 1: Publications per type

# Journal Papers

- 4. Choji, M. F., Damasceno, C. D. N., Bittencourt, I. I., and Isotani, S. Mineração de dados do Enade de 2016 a 2018: uma análise sobre o município de Araçatuba. *RENOTE 19*, 2 (2021). [DOI]
- 3. Damasceno, C. D. N., Mousavi, M. R., and Simão, A. Learning by sampling: learning behavioral family models from software product lines. *Empirical Software Engineering 26*, 1 (Jan. 2021), 4. [DOI]
- 2. Lobato, F. M. F., Damasceno, C. D. N., Leite, D. S., dos Santos, Â. K. R., Darnet, S., Francês, C. R., Vijaykumar, N. L., and de Santana, Â. L. Data analysis of multiplex sequencing at SOLiD platform: A probabilistic approach to characterization and reliability increase. *American Journal of Molecular Biology (AJMB) 08*, 01 (2018), 26–38. [DOI]
- 1. Damasceno, C. D. N., Masiero, P. C., and Simao, A. Similarity testing for role-based access control systems. *Journal of Software Engineering Research and Development* 6, 1 (Jan 2018), 1. [DOI]

# Conferences

- GARHEWAL, B., AND DAMASCENO, C. D. N. An Experimental Evaluation of Conformance Testing Techniques in Active Automata Learning. In 2023 ACM/IEEE 26th International Conference on Model Driven Engineering Languages and Systems (MODELS) (Oct. 2023), ACM
- 12. Tavassoli, S., Damasceno, C. D. N., Khosravi, R., and Mousavi, M. R. Adaptive behavioral model learning for software product lines. In *Proceedings* of the 26th ACM International Systems and Software Product Line Conference Volume A (New York, NY, USA, 2022), SPLC '22, Association for Computing Machinery, p. 142153. [arXiv] [DOI] [Best Paper Award] **Q**

- 11. Tavassoli, S., Damasceno, C. D. N., Mousavi, M. R., and Khosravi, R. A benchmark for active learning of variability-intensive systems. In *Proceedings* of the 26th ACM International Systems and Software Product Line Conference Volume A (New York, NY, USA, 2022), SPLC '22, Association for Computing Machinery, p. 245249. [arXiv]
- KORSMAN, D., STRÜBER, D., AND DAMASCENO, C. D. A tool for analysing higher-order feature interactions in preprocessor annotations in c and c++ projects. In Proceedings of the 26th International Systems and Software Product Line Conference (2022), SPLC '22
- 9. VAN HARTEN, N., DAMASCENO, C. D., AND STRÜBER, D. Model-driven optimization: Generating smart mutation operators for multi-objective problems. In 2022 48th Euromicro Conference on Software Engineering and Advanced Applications (SEAA) (2022), SEAA '22, IEEE Computer Society
- 8. Damasceno, C. D. N., and Strüber, D. Quality guidelines for research artifacts in model-driven engineering. In MoDELS'21: ACM/IEEE 24th International Conference on Model Driven Engineering Languages and Systems, Virtual Event, Japan, 10-15 October, 2021 (2021), ACM. [DOI] [arXiv]
- 7. Damasceno, C. D. N., Mousavi, M. R., and Simao, A. Learning to reuse: Adaptive model learning for evolving systems. In *Integrated Formal Methods (iFM)* (2019), Springer. [DOI]
- DAMASCENO, C. D. N., MOUSAVI, M. R., AND SIMAO, A. Learning from difference: An automated approach for learning family models from software product lines. In Proceedings of the 23rd International Systems and Software Product Line Conference, SPLC 2019, Paris, France, September 9-13, 2019 (2019), ACM Press. [DOI]
- Araujo, H. L. S., Damasceno, C. D. N., Dimitrova, R., Kefalidou, G., Mehtarizadeh, M., Mousavi, M. R., Onime, J., Ringert, J. O., Rojas, J. M., Verdezoto, N. X., and Wali, S. Trusted autonomous vehicles: an interactive exhibit. In 2019 IEEE International Conferences on Ubiquitous Computing Communications (IUCC) (2019), IEEE, pp. 386–393. [DOI]
- 4. Damasceno, C. D. N., Masiero, P. C., and Simao, A. Evaluating test characteristics and effectiveness of FSM-based testing methods on RBAC systems. In *Proceedings of the 30th Brazilian Symposium on Software Engineering (SBES)* (2016), SBES '16, ACM, pp. 83–92. [DOI] [3rd Best Paper Award] \$\mathbb{Q}\$
- 3. ABDALLA, G., DAMASCENO, C. D., GUESSI, M., OQUENDO, F., AND NAKA-GAWA, E. Y. A systematic literature review on knowledge representation approaches for systems-of-systems. In *Proceedings of the 2015 IX Brazilian Symposium on Components, Architectures and Reuse Software* (2015), SBCARS '15, IEEE Computer Society, pp. 70–79. [DOI] [3rd Best Paper Award] **Q**
- 2. Damasceno, C. D. N., Delamaro, M. E., and Simão, A. Uma revisão sistemática em teste de segurança baseado em modelos. In *Anais do 8th Simpósio Brasileiro de Teste de Software Sistemático e Automatizado Congresso Brasileiro de Software: Teoria e Prática (CBSoft '14)* (Porto Alegre, 2014), SBC. [Online in pt-BR]
- 1. Lobato, F. M. F., Damasceno, C. D., Machado, P. L., Ribeiro-Dos-Santos, A., Darnet, S. H., Goncalves, A. N. A., Alencar, D. O., and Santana, A. L. Abordagem probabilística para análise de confiabilidade de dados

gerados em sequenciamentos multiplex na plataforma abi solid. In *Anais do XLIII Simpósio Brasileiro de Pesquisa Operacional* (2011), XLIII Simpósio Brasileiro de Pesquisa Operacional. [Online in pt-BR]

# Workshop Papers

- 6. Damasceno, C. D., and Strüber, D. Family-Based Fingerprint Analysis: A Position Paper. In A Journey from Process Algebra via Timed Automata to Model Learning: Essays Dedicated to Frits Vaandrager on the Occasion of His 60th Birthday (Cham, 2022), N. Jansen, M. Stoelinga, and P. van den Bos, Eds., LNCS
- 5. Albers, M., Damasceno, C. D., and Strüber, D. A lightweight approach for model checking variability-based graph transformations. In 2022 13th International Workshop on Graph Computation Models (GCM) (2022), GCM '22. [Online]
- 4. Damasceno, C. D. N., Melo, I. C., and Strüber, D. Towards multi-criteria prioritization of best practices in research artifact sharing (emerging results). In 1st Workshop on Open Science Practices for Software Engineering (OpenScienSE 2021), Virtual Event, Brazil, 27 Sept 1 Oct, 2021 (2021). [DOI] [arXiv]
- 3. Damasceno, C. D. N. Learning from families: Inferring behavioral variability from software product lines. In *PhD Symposium at Integrated Formal Methods* (*PhD-iFM*) (2019). [Online]
- 2. Damasceno, C. D., de Souza, P. S. L., and Simão, A. Um algoritmo paralelo para priorização de testes baseada em similaridade usando OpenMPI. In *Anais da 8a Escola Regional de Alto Desempenho de São Paulo (ERAD-SP 2017)* (Porto Alegre, Brasil, 2017), ERAD-SP 2017, SBC, pp. 65–68. [Online in pt-BR]
- DAMASCENO, C. D. N., MOUTINHO, E. R., LOBATO, F. M. F., OLIVEIRA, I. I., FRANCA, A. S., AND SANTANA, A. L. Simcleaner - sistema de padronização de bases de dados utilizando funções de similaridade. In *Anais da XIV Semana de In*formática (SEMINF) e Escola Regional de Informática Norte (ERIN) (Belém - PA, 2011), XIV Semana de Informática (SEMINF) e Escola Regional de Informática Norte (ERIN). [Online in pt-BR]

#### Research Artifacts

- 3. Tavassoli, S., Damasceno, C. D. N., Khosravi, R., and Mousavi, M. R. Adaptive behavioral model learning for software product lines. In 26th ACM International Systems and Software Product Line Conference Artifact submission (2022), SPLC '22. [Self-Archived]
- 2. Damasceno, C. D. N., and Strüber, D. Quality guidelines for research artifacts in model-driven engineering. In *MoDELS'21: ACM/IEEE 24th International Conference on Model Driven Engineering Languages and Systems Artifact submission* (2021). [Self-archived]
- 1. Damasceno, C. D. N., Mousavi, M. R., and Simao, A. Learning from difference: An automated approach for learning family models from software product lines. In 23rd International Systems and Software Product Line Conference, SPLC 2019 Artifact submission (2019). [Self-archived]

# **Technical Report**

- Simao, A., Carvalho, A., Damasceno, C. D. N., dos Santos, D., dos Santos Moreira, E., Tomita, F., Maia, G. S., Hortencio, H. P., Nakel, I., Peronti, I., Pereira, J. T., Siqueira, J. P. G., Cutigi, J. F., Saviniec, L., Mundim, L. R., e Moreira, L. E. M., de Freitas, L. E., Cherri, L. H., dos Santos, M. C., de Oliveira, M. B., Junior, M. C., Chandekar, P., Gonçalves, R. F., Butkeraites, R. B., Gesuatto, R., Goel, R., Mendonça, S., de Andrade, S. A., and Cardoso, T. Testing environments & optimization: Amdocs. In 3rd Workshop Cemeal of Mathematical Solutions for Industrial Problems (2017), CEPID/Cemeal. [Online]
- 1. ABDALLA, G., DAMASCENO, C. D. N., AND NAKAGAWA, E. Y. A systematic literature review on systems-of-systems knowledge representation. Tech. Rep. 405, University of Sao Paulo (USP), mar 2015. [Online]

#### Non-Peer Reviewed

 COSTA, A., DAMASCENO, C. D. N., MELO, C., VARGAS, E. A., SANTOS, F., STEPHANI DE OLIVEIRA, G., MANÇOS, G. D. R., CORRÊA, J., DALLAGNOL, L., ROBERT, W., CORDEIRO, S., FRAGA, T. R., AND PEREIRA, V. A. The role of brazils ministry of foreign affairs in promoting innovation diplomacy. In Innovation Diplomacy: Brazilts and Regionalts Analysis and Roadmap. Bold and Wise Publisher, 2021, p. 140

#### Thesis and Dissertations

- 3. Damasceno, C. D. N. Best practices for artifact quality management in software engineering research. MBA dissertation, University of São Paulo (USP/Esalq), Sao Paulo, Piracicaba, Brazil, dec 2021. [Online in pt-BR]
- 2. Damasceno, C. D. N. Learning finite state machine models of evolving systems: From evolution over time to variability in space. PhD thesis, University of São Paulo (ICMC-USP), Sao Paulo, Sao Carlos, Brazil, may 2020. [Online]
- 1. DAMASCENO, C. D. N. Evaluating finite state machine based testing methods on RBAC systems. Master's thesis, University of São Paulo (ICMC-USP), Sao Paulo, Sao Carlos, Brazil, may 2016. [Online]

#### COMMUNITY SERVICES

#### Organizing Committee

- 1. [FASE]: International Conference on Fundamental Approaches to Software Engineering 2023. Role: Artifact Evaluation Committee Co-Chair
- 2. [SPLC]: International Systems and Software Product Line Conference 2021. Role: Publicity Chair

# **Program Committee**

- 1. [SPLC]: International Systems and Software Product Line Conference (2022, 2023)
- 2. [VaMoS]: International Working Conference on Variability Modelling of Software-Intensive Systems (2022)

- 3. [OpenScienSE]: Workshop on Open Science Practices for Software Engineering (2021)
- 4. [SimES]: Software Engineering Symposium UTFPR-DV (2017)

#### **Artifact Evaluation Committee**

- 1. **[FASE]**: International Conference on Fundamental Approaches to Software Engineering (2023)
- 2. [SLE]: International Conference on Software Language Engineering (2021)
- 3. [ISSTA]: International Symposium on Software Testing and Analysis (2021)

#### Journal Reviews

- 1. **[EMSE]**: Empirical Software Engineering (2021)
- 2. [JSS]: Journal of Systems and Software (2022)
- 3. [SciCo]: Science of Computer Programming (2020, 2022, 2023)

#### External Reviewer

- 1. [GPCE]: International Conference on Generative Programming (2022)
- 2. **[FASE]**: International Conference on Fundamental Approaches to Software Engineering (2022)
- 3. [SEFM]: International Conference on Software Engineering and Formal Methods (2021)
- 4. [TASE]: Theoretical Aspects of Software Engineering Symposium (2019)
- 5. [SPLC]: International Systems and Software Product Line Conference (2019, 2021)
- 6. [SBSI]: Brazilian Symposium on Information Systems (2019)
- 7. [ICTAC]: International Colloquium on Theoretical Aspects of Computing (2019)
- 8. **[FSEN]**: International Conference on Fundamentals of Software Engineering (2019)
- 9. [FM]: International Symposium on Formal Methods (2019)
- 10. [SBES]: Brazilian Symposium on Software Engineering (2016)

# Invited Speaker

- [SNCT/IFMA'21] Semana Nacional de Ciência e Tecnologia do Instituto Federal do Maranhão (SNCT/IFMA). Title: Software Sustainability and Scientific Research Data Management (in pt-BR). Date: 30-Oct-2021.
- 2. [CITIIC/USIL'21]. Congreso Internacional de Tecnología e Innovación en Ingeniería y Computación (CITIIC) by Universidad San Ignacio de Loyola (USIL). Title: Learning by Sampling: Learning behavioral family models from software product lines. Date: 23-Aug-2021.
- 3. [MDE Intelligence 2021]. MDE Intelligence Workshop @ MoDELS21. Title: Towards a Catalog of Best Practices for Quality Management of Model-Driven Engineering Research Artifacts. Date: 11-Oct-2021.
- 4. [FacompCast #05]. Invited to the podcast organized by the Faculty of Informatics of the UFPa. Title: Lessons and Challenges of an Academic Career. Date: 21-Jul-2021.

# Other Volunteering Services

- 1. [DriverLeics'19]: Outreach assistant and software engineer in a project to showcase AI research in various science exhibitions.
- 2. [SPLC'19]: Exhibition Assistant at The Systems and Software Product Line Conference (SPLC) 2019 held in Paris (France).
- 3. [CBSoft'18]: Exhibition Assistant at the IX Brazilian Conference on Software: Theory and practice held in Sao Carlos (SP, Brazil).
- 4. [Hour of Code'14]: Tutor in the Hour of Code @ ICMC-USP hosted at the *University of Sao Paulo* on December 13th 2014.
- 5. [WSF'09]: English-Portuguese Translator and IT support services for visitors of *The World Social Forum* (WSF) 2009.
- 6. [UFPa'09]: Exhibition Assistant in a Career fair to promote the Bachelor's Degree in Computer Science at the Federal University of Pará.
- 7. [Deaf Ministry'06]: Brazilian Sign Language (LIBRAS) interpreter for the Pastoral Ministry of the Deaf at Paroquia Santa Rita de Cassia (PA)

# Honors, Awards & Scholarships

SPLC 2022	Best Paper Award for the paper entitled Adaptive behavioral model learning for software product lines published in the 26th International Systems and Software Product Line Conference.
USP/Esalq'20	Earned a scholarship to pursue a Master of Business Administration (MBA) in Project Management. The scholarship is part of a program for students with outstanding academic performance at the University of Sao Paulo.
iFM'19	Earned the iFM PhD student bursary covering registration fees in the iFM 2019 held in Bergen (NO).
CyPhyAssure'19	Earned an ESR Funding covering travel expenses to attend the Cy-PhyAssure'19 spring school held in York, UK.
SBES 2016	3rd Best Paper Award for the paper entitled <i>Evaluating test characteristics and effectiveness of FSM-based testing methods on RBAC systems</i> published in the SBES'16.
SBCARS 2015	3rd Best Paper Award for the paper entitled A Systematic Literature Review on Knowledge Representation Approaches for Systems-of-Systems published in the SBCARS'15.
ICPC 2013	South America/Brazil Regional North Winner at the ACM International Collegiate Programming Contest 2013.
OBMEP 2005	Honorable Mention for performance on the 1st Brazilian Mathematical Olympiad for Public Schools (OBMEP).

# SCHOOLS AND WORKSHOPS ATTENDED

TAROT 2020 Selected to attend the 20th International Summer School on Training And Research On Testing (TAROT) 2020 virtually held in Porto (PT).

He staged a presentation about his Ph.D.

#### InnSciD'20

Selected to attend the São Paulo School of Advanced Science on Science Diplomacy and Innovation Diplomacy (InnSciD SP) 2020 virtually held in São Paulo (BR). He staged a presentation about the Innovation Ecosystem of São Carlos, SP; and collaborated in drafting a roadmap promoting Innovation Diplomacy to Brazils Ministry of Foreign Affairs.

#### CyPhyAssure'19

Selected to attend the first edition of the CyPhyAssure Spring School in York (UK) on 19-22 March 2019. The school targeted Ph.D. or early-stage researchers working in the area of formal methods, safety, and autonomous systems.

#### 3WSMPI'17

Attended the 3rd Workshop CeMEAI of Mathematical Solutions for Industrial Problems (WSMPI) 2017 held in São Carlos, BR. He collaborated with AMDOCS employees in the development of an approach for planning test efforts. A technical report was co-authored with 29 other experts in Software engineering and Operations research.

# PROJECTS, TOOLS, AND ARTIFACTS

2022	Academic CV by Diego
2021	MDE Artifacts
2019	FFSM_Diff, Dynamic L*M
2015	RBAC-BT
2009	Slackware.it Search Plugin

#### Personal Interests and Hobbies

Running, Cycling, Cooking, Swimming, Hiking, Traveling

#### LANGUAGES

Portuguese (native)

English (TOEFL iBT: 96/120)

German (Levels G1 to G3 at UFPa-CEG)

Dutch (Social Dutch I and II at Radboud Univ.)

[CV COMPILED TO THE WEBSITE HTTPS://DAMASCENODIEGO.GITHUB.IO/CV]