

Thomas Degueule

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Software Engineering Group
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Academic Positions

Research Scientist, CNRS

Laboratoire Bordelais de Recherche en Informatique (LaBRI)

January 2020 – current

Full-time tenured research-only position.

Postdoctoral Researcher

Centrum Wiskunde & Informatica (CWI)

January 2017 – December 2019

Post-doctoral researcher in the *Software Analysis and Transformation* group (SWAT) led by Jurgen Vinju (Professor, Eindhoven University of Technology & Researcher, CWI), in the context of the EU's H2020 project CROSSMINER and the associate team CWI-Inria *Agile Language Engineering*.

Doctoral Researcher & Teaching Assistant

Inria – University of Rennes (IRISA)

October 2013 – December 2016

“Composition and Interoperability for External Domain-Specific Language Engineering” [[degueule16composition](#)]

Advisors:

— Pr. Olivier Barais, University of Rennes 1, France

— Dr. Arnaud Blouin, INSA Rennes, France

Jury:

— Pr. Mark van den Brand – Eindhoven University of Technology, Netherlands – *Reviewer*

— Pr. Richard Paige – University of York, United Kingdom – *Reviewer*

— Pr. Sandrine Blazy – University of Rennes 1, France – *Chair*

— Dr. Benoit Combemale – University of Rennes 1, France – *Examiner*

— Pr. Ralf Lämmel – University of Koblenz-Landau, Germany – *Examiner*

— Pr. Bernhard Rumpe – RWTH Aachen University, Germany – *Examiner*

— Pr. Olivier Barais – University of Rennes 1, France – *Director*

— Dr. Arnaud Blouin – INSA Rennes, France – *Co-director*

Defense date: December 12, 2016

Research Intern

University of Nantes

January – July 2013

“Automatic Generation of Test Models for Model Transformations using Mutation Analysis” [[degueule13automa](#)]

Advisors: Dr. Jean-Marie Mottu, Dr. Gerson Sunyé

Education

University of Rennes 1

RENNES, FRANCE

PhD degree in Computer Science

2013 – 2016

University of Nantes

NANTES, FRANCE

Master's degree in Computer Science

2011 – 2013

University of La Rochelle

LA ROCHELLE, FRANCE

Bachelor's degree in Computer Science

2009 – 2011

University Institute of Technology of La Rochelle

LA ROCHELLE, FRANCE

University degree of technology in Computer Science

2007 – 2009

Awards

ACM Student Research Competition

2nd place in the International ACM SRC Grand Finals 2016

Title: “Interoperability and Composition of DSLs with Melange” [degueule16interoperability]

Distinguished Papers

Distinguished Paper Award 2018

“Shape-Diverse DSLs: Languages without Borders (Vision Paper)” [coulon18shape]

Fabien Coulon, Thomas Degueule, Tijs van der Storm, Benoit Combemale

11th International Conference on Software Language Engineering (SLE’18)

Distinguished Artifact Award 2018

“Modular Language Composition for the Masses” [leduc18language]

Manuel Leduc, Thomas Degueule, Benoit Combemale

11th International Conference on Software Language Engineering (SLE’18)

Best Software Engineering Technology Paper 2018

“Constraint-based Run-time State Migration for Live Modeling” [tikhonova18constraint]

Ulyana Tikhonova, Jouke Stoel, Tijs van der Storm, Thomas Degueule

11th International Conference on Software Language Engineering (SLE’18)

Awarded by VERSEN (Dutch National Association for Software Engineering)

Services

- PhD Jury:
 - Manuel Leduc. *On Modularity and Performance of External Domain-specific Language Implementations*, University of Rennes 1, 12 december 2019. Invited member.
- Co-organizer of the IPA Fall Days 2019 (21 invited speakers)
- Organizer of the Software Engineering Meetings (SEM) at CWI (2017 – 2019)
- Co-chair of the Artifact Evaluation Committee for:
 - ★ 21st International Conference on Model-Driven Engineering Languages and Systems (MODELS’18)
- Program Committee member for:
 - ★ 19th International Conference on Generative Programming: Concepts & Experiences (GPCE’20)
 - ★ 23th International Conference on Model Driven Engineering Languages and Systems (MODELS’20)
 - Tutorials track
 - Tools & Demo track
 - ACM Student Research Competition Track
 - ★ 1st International Workshop on Data for MDE (Data4MDE@STAF’20)
 - ★ Challenges of the French Programming and Software Engineering Research Community 2020
 - ★ 12th International Conference on Software Language Engineering (SLE’19)
 - ★ 22th International Conference on Model Driven Engineering Languages and Systems (MODELS’19)
 - Tutorials track
 - Posters track
 - ★ International Workshop on Modeling Language Engineering and Execution (MLE@MODELS’19)
 - ★ 18th International Conference on Generative Programming: Concepts & Experiences (GPCE’19)
 - ★ 11th International Conference on Software Language Engineering (SLE’18)
 - ★ 21th International Conference on Model Driven Engineering Languages and Systems (MODELS’18)
 - Tools and Demos track
 - Poster Track
 - ★ Software Language Engineering Body of Knowledge Workshop (SLEBoK@SLE’18)
 - ★ 4th International Workshop on Executable Modeling (EXE@MODELS’18)
 - ★ 3rd International Workshop on Executable Modeling (EXE@MODELS’17)
- Artifact Evaluation Committee member for:
 - ★ 10th International Conference on Software Language Engineering (SLE’17)
 - ★ 9th International Conference on Software Language Engineering (SLE’16)
- Session chair for:
 - ★ 11th International Conference on Software Language Engineering (SLE’18)
- Reviewer for:
 - ★ Software & Systems Modeling (SoSyM)

- ★ *Journal of Computer Languages* (COLA)
 - ★ *Computer Languages, Systems and Structures* (COMLAN)
 - ★ *The Journal of Object Technology* (JOT)
 - ★ *Computer Standards & Interfaces* (CSI)
 - ★ *IET Software*
 - External Reviewer for:
 - ★ Journals
 - *Software & Systems Modeling* (SoSyM)
 - *The Art, Science, and Engineering of Programming* (⟨Programming⟩)
 - ★ Conferences
 - *20th International Conference on Model-Driven Engineering Languages and Systems* (MODELS'17)
 - *9th International Conference on Model Transformation* (ICMT'16)
 - *12th European Conference on Modelling Foundations and Applications* (ECMFA'16)
 - *37th International Conference on Software Engineering* (ICSE'15)
 - *8th International Conference on Software Language Engineering* (SLE'15)
 - *7th International Conference on Software Language Engineering* (SLE'14)
 - *13th International Conference on Generative Programming: Concepts & Experience* (GPCE'14)
 - *17th International Conference on Model-Driven Engineering Languages and Systems* (MODELS'14)
 - *10th European Conference on Modelling Foundations and Applications* (ECMFA'14)
 - *21st Asia-Pacific Software Engineering Conference* (APSEC'14)
 - *17th International Conference on Model-Driven Engineering Languages and Systems* (MODELS'14)
 - ★ Workshops
 - *8th International Workshop on Modeling in Software Engineering* (MiSE@ICSE'16)
 - *1st International Workshop on Executable Modeling* (EXE@MODELS'15)
 - *6th International Workshop on Modeling in Software Engineering* (MiSE@ICSE'14)
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Invitations to Workshops

- SLEBOK: The Software Language Engineering Body of Knowledge
Dagstuhl Seminar #17342
 5 days – Germany – 2017
 - 1st Workshop on Language Reuse
McGill's Bellairs Research Institute
 7 days – Barbados – 2017
 - Globalizing Domain-Specific Languages
Dagstuhl Seminar #14412
 5 days – Germany – 2014
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Research Projects

- CWI-Inria Agile Language Engineering (ALE) associate team
 2017 – 2022
Associate research team between the DiverSE team at Inria and the SWAT team at CWI
<http://gemoc.org/aale/>
- CROSSMINER: Developer-Centric Knowledge Mining from Large Open-Source Software Repositories
 2017 – 2019
European Union's Horizon 2020 Research and Innovation Programme, project No. 732223
Work Package Leader (WP2: Mining Source Code)
<http://www.crossminer.org>
- Clarity: Ecosystem for the Model-based Systems Engineering Solution Capella
 2014 – 2017

LEOC Project

<http://www.clarity-se.org/>

- GEMOC: A Generic Framework for Model Execution and Dynamic Analysis
2012 – 2016

ANR French Project, Program INS

<http://gemoc.org/ins/>

- MERgE: Multi-Concerns Interactions System Engineering
2013 – 2016

ITEA2 European Project

<http://www.merge-project.eu/>

Teaching

During my PhD, I was a teaching assistant at the University of Rennes 1 ([ISTIC](#)) and École Supérieure d'Ingénieurs de Rennes ([ESIR](#)) where I taught software engineering courses and supervised labwork and student projects. Table 1 sums up my teaching activity.

Course name	Institute	Level	CM	TD	TP	Total
Model-Driven Engineering (IMTQL)	ESIR	Master 2	4	4	18	26
Model-Driven Engineering (IDM)	ISTIC	Master 2	-	-	24	24
Object-Oriented Analysis and Design (ACO)	ISTIC	Master 1	-	-	22	22
Object-Oriented Architectures (AOC)	ISTIC	Master 2	-	-	10	10
Distributed Information Systems (SIR)	ISTIC	Master 1	2	2	10	14
			6	6	84	96

Table 1: Teaching activity (in hours) – CM = Lectures, TD = Seminars, TP = Practical sessions

Alongside my teaching activity, I was also invited to review, take part in the jury, and grade several master's theses.

Academic Software Development

- Eclipse Scava
<https://eclipse.org/scava/>
 - The Melange language workbench [[melange](#)]
<http://melange-lang.org>
 - The Action Language for Ecore (ALE)
<http://gemoc.org/ale-lang/>
 - The K3 meta-language
<http://www.kermeta.org>
 - The Eclipse GEMOC Studio
<https://eclipse.org/gemoc/>
 - KCVL
<https://diverse-project.github.io/kcvl/>
 - Alex
<https://diverse-project.github.io/alex/>
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Publications