

Curriculum Vitae – Romain Pingué

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RESEARCH INTERESTS

- Engineering design
- Modelling & Simulation for Product Design
- Data science

EDUCATION

- **Toulouse 3 University – 2006**
B.Sc. in Mechanical Engineering specialising in Aerospace Technology
- **ESTIA Institute of Technology – 2012**
M.Eng in Computer Aided Engineering
- **Cranfield University, School of Engineering, Applied Mathematics & Computing Group – 2012**
M.Sc. in Computational & Software Techniques in Engineering - Computer Aided Engineering
Thesis title: Prognostics and Health Management design technology: research on application of functional modelling to structural integrity problems.
- **Arts & Métiers ParisTech, LSIS UMR CNRS 7296 – 2016**
Ph.D in Product Design
Thesis title: A collaborative requirement mining framework.

POSITIONS HELD

- **Assistant professor, Grenoble Institute of Technology, Fall 2018-present**
| TBC.
- **Assistant professor, Arts & Métiers ParisTech – LSIS UMR CNRS, Winter 2018-Fall 2018.**
| Teaching Computer Aided Engineering (CAD, PDM, multibody modelling and simulation).
| Research on:
 - a new method and tool to collect, validate, recommend, check, and manage engineering design rules in an extended CAx (CAD, CAM, CAE, ...) environment.
 - a tool for supervising systems engineering activities, such as interfaces management, tradespace exploration, and traceability.
 - the methodological integration of data science techniques to gain insight from hundreds or thousands of requirements before making informed decisions early on.
- **Post-doctoral research fellow, Airbus Helicopters, Fall 2016-Fall 2017**
| R&T on a simulation-based systems engineering method to specify, validate, design, and verify engineered systems. Experimentation with the MathWorks suite on the landing gear systems.
- **Research engineer, Supméca – LISMM, Winter 2013-Fall 2013**
| R&T on systems modelling and simulation with the Dassault Systèmes 3D experience RFLP framework.

STUDENTS

- **Ph.D. students:**
 - Simon Debord
Thesis: Research on a design rules framework. (in progress)
- **M.Sc. students:**
 - Nicolas Pawlowsky
Thesis: R&T on a virtual Obeya for supervising systems engineering activities. (2018)
 - Sarra Hogma
Thesis: R&T on a simulation method to validate model-based product specifications. (2017)
- **B.Sc. students:**
 - Vincent Ducasse
Thesis: R&T on a recommendation system for requirements engineering. (2016)
 - Nicolas Martel
Thesis: Machine learning-based classification of textual requirements. (2015)
 - Karim Badr
Thesis: Multiple criteria analysis for value-driven requirements engineering. (2015)
 - Alexy Torres
Thesis: Prototyping of Web application for requirement mining. (2015)

PUBLICATIONS

- **Theses**

[1] **A requirement mining framework.** Romain Piquié. Ph.D. Thesis. Arts & Métiers ParisTech. LSIS UMR CNRS 7296 Laboratory. Aix-en-Provence. 2016

[2] **Prognostics and Health Management design technology: research on application of functional modelling to structural integrity problems.** Romain Piquié. M.Sc. Thesis. Cranfield University. School of Engineering. Applied Mathematics & Computing Group. Cranfield. 2012

- **Refereed Journal Articles**

[3] **Requirement mining for model-based product design.** Romain Piquié, Philippe Véron, Frédéric Segonds and Nicolas Croué. In *International Journal of Product Lifecycle Management*, 9(4), p. 305-332, 2016.

[4] **An illustrated glossary of ambiguous terms used in discrete manufacturing.** Romain Piquié, Louis Rivest, Frédéric Segonds and Philippe Véron. In *International Journal of Product Lifecycle Management*, 8(2), p. 142-171, 2015.

- **Refereed Conference Papers**

[5] **A requirement mining framework to support sub-systems suppliers.** Romain Piquié, Philippe Véron, Frédéric Segonds and Nicolas Croué. In *Proceedings of the 28th CIRP Design Conference*, Nantes, France, May 23-25 2018, p. 410-415 (Nominated for the best paper award).

[6] **Property Model Methodology: a case study with Modelica.** Romain Piquié, Patrice Micouin, Philippe Véron and Frédéric Segonds. In *Proceedings of the 11th International Conference on Tools and Methods of Competitive Engineering (TMCE)*, Aix-en-Provence, France, May 9-13 2016, p. 79-91, (Selected for Engineering with Computers)

[7] **Natural language processing of requirements for model-based product design with Enovia-Catia V6.** Romain Piquié, Philippe Véron, Frédéric Segonds and Nicolas Croué. In *Proceedings of the 12th IFIP International Conference on Product Lifecycle Management (PLM)*, Doha, Qatar, October 19-21 2015, p.

205-215 (Nominated for the best paper award and selected for the International Journal of Product Lifecycle Management).

[8] A collaborative requirement mining framework to support OEMs. Romain Piquié, Philippe Véron, Frédéric Segonds and Nicolas Croué. In *Proceedings of the 12th International Conference on Cooperative Design, Visualisation and Engineering (CDVE)*, Mallorca, Spain, September 20-23 2015, p. 105-114.

COURSES TAUGHT

- 2017-2018. CAD (modelling, assembly, kinematics, drafting) and Product Data Management at *Arts & Métiers ParisTech* Engineering School, post-graduate students, 58 hours.
- 2017-2018. Kinematics and dynamics of multibody systems at *Arts & Métiers ParisTech* Engineering School, post-graduate students, 20 hours.
- 2015-2016. CAD (modelling, assembly, kinematics, drafting) and Product Data Management at *Arts & Métiers ParisTech* Engineering School, post-graduate students, 35 hours.
- 2015-2016. Systems modelling and simulation at *Ecole Polytechnique Féminine* Engineering School, post-graduate students, 24 hours.
- 2014-2015. Systems modelling and simulation at *Ecole Polytechnique Féminine* Engineering School, post-graduate students, 16 hours.

SERVICE

- Reviewer for the 87th INCOSE Great Lake Regional Conference, October 17-20 2018, Indianapolis.
- Reviewer for the 15th annual International CAD Conference, July 9-11 2018, Paris.
- Reviewer for the 28th annual INCOSE International Symposium, July 7-12 2018, Washington.
- Reviewer for the 13th International Conference on Cooperative Design, Visualization and Engineering, October 17-20 2017, Mallorca.