ROMAIN PINQUIÉ
Date of Birth: 31 January 1988
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WORK EXPERIENCE

10/2013–10/2016 **Ph.D Candidate - A Requirement Mining Framework**
Arts & Métiers ParisTech - Institut Carnot ARTS
Laboratoire des **S**iences de l'**I**nformation et des **S**ystèmes - LSIS UMR CNRS 7296
Industrial partner: Dassault Système's spin-off Keonys

Proposition: A collaborative requirement mining framework to enable subcontractors to gain insight and discover opportunities in a massive set of text-based requirements so as to make effective strategic decisions early on.

Skills: Requirements engineering; Natural language processing; Machine learning; Graph theory; Data visualisation; Multivariate analysis.

Concurrent activities:

- Research on the implementation of the model-based systems engineering Property Model Methodology with Modelica.
- Active member of the working group that gathers the INCOSE's French chapter AFIS and the PLM Lab association.
- Teaching - Computer Aided Design - 32H. Introduction to solid modelling and mechanical assembly using ENOVIA/CATIA V6 to the first-year engineering postgraduate students at Arts & Métiers ParisTech.
- Teaching - Systems Modelling & Simulation - 16H. Introduction to systems modelling and simulation using Dymola to the final-year engineering postgraduate students at École Polytechnique Féminine.

02/2013–10/2013 **R&D Engineer in Computer-Aided Engineering**
Institut Supérieur de Mécanique de Paris, Paris, France
Laboratoire d'**I**ngénierie des **S**ystèmes **M**écaniques et des **MA**tériaux - LISMMA

Activity: I focused on the use of ENOVIA/CATIA V6 environment to not only design 3D parametric digital mock-up, but also model and simulate multi–engineering systems based on the Model-Based Systems Engineering CATIA V6 RFLP method and Dymola.

Skills: Systems engineering; Modelling and simulation.

04/2012–11/2012 **Trainee as Prognostics and Health Management Engineer**
PHM Technology Pty Ltd, Melbourne, Australia

Activity: R&D of Prognostics and Health Management design technology in application to complex systems.

Skills: Systems functional modelling and analysis (FMECA, FFBD); Probabilistic reliability engineering (RBD, FTA, Monte-Carlo); Safety analysis (HaZop, LOPA, SIL).

05/2011–09/2011 **Trainee as Mechanical Design and Test Engineer**
Hamilton Sundstrand's Ratier-Figeac unit, Figeac, France

02/2010–04/2010 **Trainee as Stress Engineer**
Études et Coordination Technique d'Acquitaine, Pau, France

04/2008–06/2008 **Trainee as Mechanical Engineer**
ISP System, Tarbes, France

EDUCATION

2011–2012 **Cranfield University, Applied Mathematics and Computing Group.** *Cranfield, England*
MSc Computational & Software Techniques in Engineering, option Computer-Aided Engineering

2009–2012 **ESTIA Institute of Technology.** *Biarritz, France*
Master's Degree in Computer-Aided Engineering

2008–2009 **Louis Rascol College.** *Albi, France*
Preparatory classes for the competitive entrance exam to French Engineering School

2006–2008 **Paul Sabatier University**, *Toulouse, France*
Bachelor's Degree in Mechanical Engineering specialised in Aerospace Sciences

PUBLICATIONS

Property model methodology: a case study with Modelica
11th Int. Conf. on Tools and Methods of Competitive Engineering, Aix-en-Provence, France, 9–13 May 2016

Natural language processing of requirements for model-based product design with Enovia-Catia V6
12th IFIP Int. Conf. on Product Lifecycle Management, Doha, Qatar, 19–21 October 2015

A collaborative requirement mining framework to support OEMs
12th Int. Conf. on Cooperative Design, Visualisation and Egineering, Mallorca, Spain, 20–23 September 2015

A illustrated glossary of ambiguous PLM terms used in discrete manufacturing
International Journal of Product Lifecycle Management, 8(2), 2015

LANGUAGES

English: Professional working proficiency *(ILR Level 3)* **Spanish:** Limited working proficiency *(ILR Level 2)*

SKILLS

- **Systems Engineering:** Catia V6 RFLP, Modelica (SystemModeler, Dymola, Catia V6 DBM, OpenModelica), Simulink, Axiomatic design, PMM, SysML, APTE, FAST, SADT, FFBD.
- **Data Science:** Weka, R (tm, TextTools, ggplot2), Python (numpy, matplotlib, scikit-learn), Stanford CoreNLP, Apache Tika, Neo4J, D3.js, WordNet, ConceptNet 5.
- **CAX & PLM:** ENOVIA-CATIA V6/5 (Part & Assembly Design, Drafting, Wireframe & Surface, Generative Shape Design, Freestyle, Knowledge Advisor, Machining, Generative Structural Analysis), ABAQUS CAE.
- **RAMS:** MADe, FMECA, FTA, RBD.
- **Progamming:** Java, JSF, Eclipse, Maven, JavaScript, CSS, HTML, Bootstrap, PrimeFaces, BootFaces, Jsoup, Jdom, LaTeX.

REFEREES

Dr Carol A Armitage
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Cranfield University
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