ROMAIN PINQUIÉ
Date of Birth: 31 January 1988
Nationality: French

Institut Supérieur de Mécanique de Paris - SupMéca Paris[a]
Laboratoire d'Ingénierie des Systèmes Mécaniques et des MAtériaux - LISMMA[b]
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[a] `http://www.supmeca.fr`
[b] `http://lismma.supmeca.fr`

COMPUTER-AIDED ENGINEERING:
Design, Modelling, Simulation and Analysis

WORK EXPERIENCE

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

Activity: *Modelling as well as simulation of multiphysics phenomena for both academic and research projects.*

I am currently focussing on the use of Dassault Système's software, CATIA V6, to design, model, simulate and analyse complex dynamic multi–engineering systems.

- Parametric solid modelling of Digital Mock-Up
- Product's – **R**equirements - **F**unctions - **L**ogical - **P**hysical – definition
- Multiphysics modelling and simulation using MODELICA language

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

Activity: *Development of Prognostics and Health Management design technology in application to complex systems.*

- Functional Modelling and Analysis; i.e. Functional Block Diagram and FMECA
- Probabilistic Reliability Engineering; i.e. RBD, FTA and Monte-Carlo Algorithm
- Research on automated Safety Analysis tool for HaZop, LOPA and SIL

→*Average FR: 19.2/20 Best internship — Grade UK: 70% - Standard = Very Good*

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

Activity: *3D CAD of test benches using CATIA V5 and TEAMCENTER PLM software. Set-up and monitoring of qualification testing of aircraft equipments.*

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

Activity: *Development of Excel software in order to ease and speed up automated stress calculations of wood structures.*

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

Activity: *Mechanical design and CAD, CATIA V5, of a motorised screw jack.*

EDUCATION

2011–2012 **Cranfield University, School Of Engineering**
Applied Mathematics and Computing Group
MSc Computational & Software Techniques in Engineering
Option: Computer-Aided Engineering

Main subjects included, Finite Element Analysis, Finite Difference Analysis, Geometric Modelling, 3D Solid Modelling, Computational Methods for solving linear systems of equations and eigenvalue problems, Computational Engineering Design Optimisation, Computational Fluid Dynamics, C/C++ and Open-GL, Management for technology.

→Grade: 70% - Standard = Very Good

2009–2012 **École Supérieure des Technologies Industrielles Avancées - E.S.T.I.A**
Master's Degree in Computer-Aided Engineering

Core subjects included, CAD, CAM, FEA, Finite Element Theory, Continuum & Solid Mechanics, C/C++ Programming, Product Development, Systems Control, Mathematics.

2008–2009 **Preparatory classes for the competitive entrance exam to French Engineering School**
Focussed on the topics Mathematics, Physics and Engineering.

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

LANGUAGES

- **French:** Native proficiency *(ILR Level 5)*
- **English:** Professional working proficiency *(ILR Level 3)* - TOEIC score: 765 before international experiences
- **Spanish:** Limited working proficiency - 15 days training at *Universidad del País Vasco* Bilbao *(ILR Level 2)*

SKILLS

- **CAD:** CATIA V6/5 (Part and Assembly Design, Drafting, Wireframe and Surface, Generative Shape Design, Freestyle, Knowledge Advisor, Functional Molded Parts workbenches)
- **Systems Engineering:** CATIA V6 RFLP, MODELICA, DYMOLA, SIMULINK, SysML, APTE, FAST, SADT
- **FEA:** ABAQUS CAE, CATIA V5 (Generative Structural Analysis)
- **PLM:** ENOVIA V6, TEAMCENTER
- **CAM:** CATIA V5 (Prismatic and Lathe Machining)
- **Scientific Computing:** Matlab, Maple, MuPAD
- **Scientific Progamming:** C/C++, LaTeX, HTML
- **Reliability Engineering:** FMECA/AMDEC, Fault Tree Analysis, RBD, MADe

REFEREES

Dr Carol A Armitage
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