

# Xavier Danaux

*Dynamic and innovative engineer/jurist*

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single with driver licence

*Am willing to tear down walls, build bridges, and light fires.  
I have no real experience, but lots of energy, a bit of that "vision thing",  
and I'm not afraid to start from the beginning.*

## Assets

- Soon-to-be mechanical engineer specialized in computational fluid dynamics, with a good legal education.
- Leadership skills.
- Photography and design enthusiast.
- Loves to tackle complex problems.
- Likes practicing adventure sports like skying, rock climbing and scuba diving, and has been a boy scout for five years.
- Open minded and eager to learn.
- Creative with a strong analytical mind.
- World citizen.

## Education

2003–current **Master of Science in Mechanical Engineering**, *Université catholique de Louvain*.  
1<sup>st</sup> year: 82%    2<sup>nd</sup> year: 74%    3<sup>rd</sup> year: — (currently being assessed)

2005–current **Master of Laws**, *Université catholique de Louvain*.  
1<sup>st</sup> year: — (currently being assessed)

2003–2005 **Bachelor of Laws**, *Université catholique de Louvain*.  
1<sup>st</sup> year: 70%    2<sup>nd</sup> year: 67%

2001–2003 **Bachelor of Science**, *Université catholique de Louvain*.  
1<sup>st</sup> year: 74%    2<sup>nd</sup> year: 76%

## Master thesis

title *On the rheology of entangled polymers*

supervisors Pr Christian Bailly and Pr Roland Keunings

description Study of the complex behaviour of viscoelastic fluids, and in particular of entangled polymers. The study is focussed on double-step strain and recoil deformations, comparing experimental data to simulations based on recent microstructural models. Depending on the model used, numerous mathematical tools are used: numerical solving of nonlinear PDEs, stochastic equations, Monte-Carlo simulations, Fourier transforms, . . .

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## Experience

- april 2004–  
current **Administrator**, *Alterezo ASBL*, Liège.  
Nonprofit association aimed at helping small organizations access modern communication tools via the internet, and promoting the use of open source solutions and open standards.  
*See [www.alterezo.be](http://www.alterezo.be).*
- 2005–2006 **Mathematics tutor**, *UCL*, Louvain-la-Neuve.  
Supervision of practical sessions for a mathematical course given to second year engineering students (course *FSAB1104: Numerical Methods*).  
*See [www.legat-online.be/b2q1/num](http://www.legat-online.be/b2q1/num).*
- 2004–2006 **Cultural project leader**, *Tchouque-Tschouk Kot*, Louvain-la-Neuve.  
Leader of a student home with a cultural project, requiring day to day management as well as the organization of public events.  
*See [www.organe.be](http://www.organe.be).*
- 1999–2001 **IMO preselected**, *SBPMef*, Wépion.  
Advanced mathematical training, as belgian preselected candidate for the International Mathematical Olympiads, selected by the Belgian mathematical society.  
*See [imo.math.ca/belgium.html](http://imo.math.ca/belgium.html).*

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## Languages

French	<b>Native</b>	
Dutch	<b>Near-native</b>	<i>Primary education degree obtained in a dutch college (Sint-Jozefscollege te Sint-Pieters-Woluwe).</i>
English	<b>Very good</b>	<i>Many journeys in english speaking countries, including the United States, the United Kingdom and Kenya.</i>
Chinese	<b>Elementary</b>	<i>Following official courses at the "Institut des Langues Vivantes" (UCL), for the second year now.</i>

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## Computer knowledge

OS	Linux, Unix, MacOS, Windows	desktop	OpenOffice, StarOffice, MS Office
programmation	JAVA, C/C++	scripting	PHP, Shell, Ruby
scientific	Matlab, Autocad, Abaqus	typography	L <sup>A</sup> T <sub>E</sub> X, ConT <sub>E</sub> Xt, Scribus, QuarkXPress
web design	XHTML, CSS, AJAX	database	MySQL, PostgreSQL
administration	Apache, Mailman		