

xavierdanaux

*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.*

Strengths

- 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*.
1st year: 82% 2nd year: 74% 3rd year: — (currently being assessed)
- 2005–current **Master of Laws**, *Université catholique de Louvain*.
1st year: — (currently being assessed)
- 2003–2005 **Bachelor of Laws**, *Université catholique de Louvain*.
1st year: 70% 2nd year: 67%
- 2001–2003 **Bachelor of Science**, *Université catholique de Louvain*.
1st year: 74% 2nd 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 focused 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, ...

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.
- 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.
- 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.
- 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.

Languages

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

Computer skills

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