Xavier ROUBY

Born in Charleroi, Belgium, May 20, 1980, Belgian.

Chaussée de Huy 178/1, 1325 Chaumont-Gistoux, Belgium +32.495-27 19 47.

x.rouby@pfease.com   www.linkedin.com/in/xavierrouby   www.twitter.com/xrouby

POSITIONS

Co-founder and Owner [July 2010 – current position].
Senior code developer, senior analyst, project manager, director.
> Pfease SPRL, www.pfease.com
> *Data mining, information management, business intelligence, decision support, ERP, dashboards,*
> *Consulting, web 2.0 portals: on-demand software development and advanced data*
> *analyses. Implementation of high-energy physics analysis techniques into businesses for business*
> *intelligence and data mining.*

Research Associate : [September 2002 – July 2010].
> Université catholique de Louvain UCL (Ph.D. Student & Post Doc).
> Albert Ludwig Universität Freiburg (BMBF Post Doc).
> Places : Louvain-la-Neuve (Belgium), Geneva (Switzerland), Freiburg-im-Breisgau (Germany),
>   London (UK), DESY (Hamburg), Strasbourg (France), Aachen (Germany).
> Research fields : photon-induced physics at the LHC, forward instruments, detector fast simulation.
> Software activities : development, maintenance, project coordination of various projects :
>   DELPHES (fast simulation of generic collider experiment), ATLFAST II (ATLAS exp.),
>   HECTOR (simulation of particles in beamlines), Trigger algorithms (CMS experiment),
>   FHIT (GUI for industrial tester of detector electronics).
> R&D : cryogenic and edgeless silicon microstrip detectors : design, assembly, tests (RD39 Coll.)
>   design and assembly of detector test and validation setups.
>   CMS tracker : detector assembly and qualification (CMS experiment).
>   6m-tagger : detector assembly and qualification (ZEUS experiment).
> Communication : multiple oral communications in international workshops and conferences, also
>   on behalf of collaborations. Several publications in peer-reviewed journals.

CERN CMS L3 Coordinator : [September 2007 – June 2008].
> Organisation Européenne pour la Recherche Nucléaire CERN, CMS experiment.
> Definition and implementation of algorithms for the fast online event selection, CMS Fwd Physics.

Teaching Assistant : [September 2002 – June 2010].
> More than 1750 hours of teaching : laboratory and exercise sessions, student supervision.

EDUCATION

Programme d'aide à la création d'entreprise INEX, Centre ID, Louvain-la-Neuve [2010].
Ph.D. – Master in High Energy Particle Physics at Université catholique de Louvain [2002-2008].
> *Phenomenology, simulations and analyses for photon-induced physics at LHC.*
> *Software activities, Detector R&D.*

Summer Student at Imperial College [2003].
> *Installation of a dedicated DAQ for tracking detectors.*

Summer Student at CERN [2001].
>   *USB remote control and GUI of detector components.*

4th ESA student parabolic flight campaign [2001].
> *Equimass experiment. Design, assembly, flight, data analysis.*

Graduation in Physics at Université catholique de Louvain [1998-2002].
> Scientific Price 2003 of the Belgian Physical Society.

SKILLS AND COMPETENCES

Responsibilities:

> **Entrepreneur and director at Pfease SPRL** [2010 – current position].
> Project manager for HECTOR and DELPHES projects [2005 – 2009].
> CERN L3 Coordinator – shared position (CMS Forward Physics) [September 2007 – June 2008].
> Convener of the UCL-CP3 lunch seminars (25/year) [September 2006 – June 2008].
> Co-organizer of the "Journée des Rhétos" in Physics Department [2005 – 2006].
> Administrator of a student astronomy club [2001 – 2002].

Team work:

> Work experience in various small team projects, ranging from 2 to 8 persons.
> Member of CERN RD39 (25 p.), FP420 (50 p.) and CMS (6000 p.) scientific collaborations.
> Member of the development teams of ATLFastII, HECTOR, DELPHES (> 25 citations).

Technical:

> Assembly of silicon microstrip detectors, DAQ operator. Development of a quality-assessment setup for edgeless silicon detectors. Interfacing detector read-out electronics.

Computing science:

> Object-oriented programming, C/C++/ROOT, Support tools (Eclipse, make, CVS, SVN, doxygen, valgrind). NI Labview, AutoCAD (basics), Borland Pascal, Borland Delphi (basics), Python (basics). (X)HTML, CSS, Javascript (DHTML), jQuery, PHP, MySQL, TWIKI. Usual office software, LaTeX. Linux, Microsoft Windows, Mac OS-X. Good knowledge in computer hardware.
> Teaching assistant in C++ at the Université catholique de Louvain.

Communications:

> Many oral communications in international conferences, workshops and collaboration meetings.
> Several publications in peer-reviewed journals (exhaustive list upon request or on website).

Teaching and outreach activities:

> More than 1250 hours of student supervision in laboratory and exercise sessions for graduate and master students in several academic faculties (medecine, agronomy, science).
> *Samedis de la physique* (ULB), 6 lectures on particle detection in high energy physics [2006 – 2008].
> *Master classes in Particle Physics* (UCL), 2/year [2005 – 2008] for secondary schools.
> *La nuit des chercheurs*, (UCL) [2006], for families.
> *Festival des Sciences – Printemps des Sciences* (UCL) [2002 – 2004], for secondary schools.

Artistic:

> Pianist – drummer – photographer.

Languages:

> French (mother tongue) – English (proficient user) – German (basic user) – Dutch (basic user).

Mobility:

> Holder of a Belgian driving license, category B vehicle; Car holder.
> Familiar with short period travels.