Blai Pié i Valls

http://blai.me
blai.pie.valls@gmail.com ✉
+34 616019371 ☎

24th October, 2016

Work Experience

June 2016 – present	**Better Consultants**
IT consultant	HOST analyst and developer at Banc Sabadell.
PMO	Design and deployment Management Department (Banc Sabadell).
Oct. 2013 – present	**Associació Quadrívium per la Divulgació (non-profit)**
Founder and Secretary	Fostering of scientific knowledge in general audiences. Mentoring of communication skills among young scientists.
	http://www.quadrivium.cat/
Nov. 2015 – June 2016	**Editorial Vicens Vives**
Technical Editor	Update of high school physics textbooks to L.O.M.C.E. education law.
Oct. 2011 – Sept. 2015	**University of Barcelona**
Predoctoral researcher	Project on History of the Quantum Theory (early 20th century). Science outreach conferences and interviews (TV3 and RAC1).
Teaching assistant	Introductory and advanced courses in Physics, Mathematics, Engineering and History of Science.
June 2009 – Sept. 2015	**Encontres amb el Tercer Cicle**
Coordinator and logistics	Management of periodic event with the aim to establish a scientific network between predoctoral researchers and undergraduate students.
	Leading a 5–10 people team. More than 50 invited speakers. Audience reach of more than 1500 students.
	http://www.ub.edu/fisica/encontres
Oct. 2009 – Oct. 2011	**European Organization for Nuclear Research (CERN)**
Predoctoral researcher	Project LHCb: Simulation of experimental particle physics. Big data and statistical analysis.
	Project CLIC: Assessment of detector design and simulation. Hardware simulation.
May 2005 – July 2010	**Centre Acadèmic Pié**
Founder and manager	Private tuition center for students with learning difficulties. Levels: elementary school, high school, university.
	Coordination of a team of 8–12 teachers.150–200 students per academical year.
	http://academia.pie.cat

Education Background

Oct. 2009 – Sept. 2015	**University of Barcelona, Dept. of Fundamental Physics**
Ph.D.	in History of Quantum Physics. GPA: Excellent
Sept. 2011 – June 2012	**Autonomous University of Barcelona**
B.Sc.	in Applied Statistics. Completed one course with excellent marks. Resigned.
Oct. 2009 – July 2010	**University of Barcelona**
M.Sc.	in Astrophysics, Particle Physics and Cosmology. Specialization in Particle Physics and Gravitation. GPA: 9.1/10 (with Honors)
Sept. 2004 – June 2009	**University of Barcelona**
B.Sc.	in Physics. GPA: 3.21/4 (with Honors)

Programming Skills

Python

◊ Good knowledge of language, framework and libraries.

◊ Wide use for simulation of physics and hardware.

◊ Data management and statistics at LHCb project at CERN.

Other languages and platforms:

- » *SPSS*
- » *R*
- » *Fortran*
- » *ROOT*
- » *Matlab*
- » *C++*
- » *SQL*
- » *GRID computing*
- » *JIRA*
- » *Clarity*

Office suite

◊ Advanced skills in MS Word and MS Excel (and opensource equivalents).

◊ Good knowledge of MS Access.

Layout design

◊ Adobe InDesign

Java

◊ Good knowledge of language and framework.

◊ Use for simulation at CLIC project at CERN.

◊ Android applications.

Web design

◊ Advanced knowledge of web design languages:

- » *HTML5*
- » *CSS3*
- » *JavaScript*
- » *Ruby (beginner)*

◊ Static and responsive web pages.

◊ See examples in:

http://www.ub.edu/fisica/encontres

http://www.quadrivium.cat/

Operating systems

◊ Excellent knowledge of *Linux* and *Windows*.

◊ Good knowledge of *Mac*.

Relevant Publications

◊ B. Pié & E. Pérez, The historical role of the Adiabatic Principle in Bohr's quantum theory. (2016)

◊ E. Pérez & B. Pié, Bohr and Ehrenfest: transformations and correspondences in the early 20's. (2016)

◊ B. Pié, L'experiment d'Stern i Gerlach en el seu context històric (PhD thesis). (2015)

◊ B. Pié & E. Pérez, L'àtom d'Schrödinger. (2014)

◊ CERN Yellow Report CERN-2012-03

◊ For a complete list of contributed publications see: https://www.researchgate.net/profile/Blai_Valls

Online Courses

Ongoing	Computational Investing I (***Georgia Institute of Technology***)
Dec. 2015	Strategic Business Analytics (***ESSEC & Accenture***)
April 2014	Programming Applications for Android (***Univ. of Maryland***)
Nov. 2013	Writing in the Sciences (***Stanford University***)
April 2013	Introduction to Computer Networks (***Univ. of Washington***)
June 2012	Cryptography I (***Stanford University***)
Dec. 2008	Writing techniques (***Univ. of Barcelona, IL3***)

Languages

Catalan and Spanish
Native

English
TOEFL 112/120

German
B1

French
A2

Awards and Honors

Feb. 2014	Voted *Best Presentation* in JIPI 2014 conference (Barcelona, Spain)
Jan. 2010	Awarded the *Extraordinary Bachelor Prize* by the University of Barcelona
Jul. 2008	CERN Summer Student
April 2004	*CIRIT Prize to foster science among youth*, Generalitat de Catalunya
Oct. 2004	Honor Mention in the *XV Spanish National Physics Olympiad (Vigo, Spain)*

Other Interests

◊ Press

◊ Reflex photography

◊ Writing (essay & poetry)

◊ Water-polo

◊ Argentinian tango