Álvaro Díez

Curriculum Vitae

Pre - University Studies

2008-2010 Bachillerato Español, Instituto Santa Clara, Santander, High School Studies.

• Final grade: 8.1/10 Including selectividad¹

2008-2010 **International Baccalaureate**, *Instituto Santa Clara*, Santander, *High School Studies*.

Studied simultaneously with "Bachillerato" and completed in two years following High

School's schedule

o Final grade: 31 pt

- Including 6/7 in Physics

University Studies

2010-2017 **Degree in Physics**, *Universidad de Cantabria*, Santander, *Final Grade*. 7.45/10

Remarks:

- o 2012-2013 Erasmus in Bergen (Norway)
- Bachelor's thesis:

Title Fast simulation of transients in irradiated silicon detectors

Supervisor Marcos Fernández García (UC-CERN)

Experience

Laboral

June- Internship at CERN, CERN, Geneva, Worked as part of the PH-DD-SSD group September at CERN, Working as main developer of TRACS, a fast simulator for irradiated (2015) silicon detectors in C++.

Summer Student Program

February- October at CERN, CERN, Geneva, Worked as part of the EP-DT-FS-Gas group at CERN for gas control systems, In charge of controlling gas mixtures inside selected gaseous CERN-LHC detectors and providing technical assistance to researches in gas-related matters.

Technical Student Program

National university-entry exam

Vocational

2013-current Founder and member of the Physics Mentor Group, Santander,

The Physics Mentor Group is a group founder by students and aimed to help students in their first and second year at university.

The group has collaborated with IFCA and UC in events like "Reasearcher's nite" and also organized their own.

Sports

2007-current Handball Referee, 8 years of handball refereeing

- , Highest Category: National Referee (2011-2014)
- , Refereed several National Championships and two Granoller's Cups (International Tournament).
- 2009–2010 Handball coach of a kids team.

Journalism

2012–2013 Android Blog Journalist, El Androide Libre.

One year work as journalist for one of the top Spanish weblogs about Android

2014–current **Science Blog Journalist**, *Medciencia*.

Currently working as physics journalist for the Medciencia weblog

Languages

English C1 Level Cambridge Certificate in Advance English obtained in May 2010

French Basic Level Studied french at school 2004-2008 & lived in France for 11 months

Computer skills

Software C++/C, Java, gdb, UML, Matlab, ROOT, Intermediate Level, Experience

Development developing software (mainly physics simulators and physics oriented software) in the three aforementioned languages and UML diagrams., Experience using gdb (with and without graphical front-ends such as ddd) debugger.

Knowledge of HTML, CSS, JavaScript, Python, bash scripting, FORTRAN (with some experience in small projects in all of them) and C-Cuda.

Operative Linux, Mac OSX, Windows, *Intermediate-Advanced Level*, Experience with Win-Systems dows and UNIX/LINUX based OS including command line interface..

Basic knowledge of AWK and SED

Office Suites MSOffice, LibreOffice, LibreOf

Text Editors Vim, Sublime Text, Intermediate Level, Great experience using vim and Sublime Text 3 as text editors for software development and text processing. Basic knowledge of GNU-Emacs, Less, Nano...

Additional Information

Driving License Category: B

References and Publications

Academic

- Personal GitHub (https://github.com/AlGepe)
- Publication at CERN Developing a fast simulator for irradiated silicon detectors (http://cds.cern.ch/record/2057142)
- Final talk on project at CERN: TRACS radiation upgrade v2.0(https://indico.cern.ch/event/447412)
- Talk at Summer Student Sessions at CERN Developing a fast simulator for irradiated silicon detectors
- Public Gas Monitoring web: Test Gas Monitoring
- O Bachelor thesis:

Personal repository(tex format): https://github.com/AlGepe/TFG

lournalism

Articles featured in the main cover of Meneame.

- o Graphene Supercapacitors: batteries will charge in 30 seconds and last all day
- Why does blue LED deserve a Nobel Prize in Physics and green LED doesn't?
- The story of the "invisible monster" that wrecked trains in Siberia
- How to think in 11 dimensions and not die in the process