



Alvaro Diez

Notable Pre-University Studies

2008-2010 International Baccalaureate, IES Santa Clara.

University Studies

2010-2017 Degree in Physics, Universidad de Cantabria (UC), Santander.

Remarks:

- o 2012-2013 Erasmus in Bergen (Norway)
- Bachelor's thesis: Fast simulation of transients in irradiated silicon detectors
- Publication: TRACS: A multi-thread transient current simulator for [...]

Work Experience

Omni Calculator

- 2023 Now **Translation**, English to Spanish translation.
 - Additional SEO optimisation of older texts, mass mailing campaigns and general improvement and automation tasks
- 2022 2023 **Marketing**, Marketing specialist with emphasis on mass mailing and social media copywriting.
 - Additional development of automation tools for the department.
- 2020 2022 **Video Production**, Full creation of science communication and explanation videos for YouTube and company promotion.
 - Additional conceptual and video support for social media
- 2018 2020 Calculator creation and copywriting, Creation of calculators.

Additional promotion of calculators (Interviews with Nature, Forbes, national TV...)

CERN

- 2015 **Internship at**, *CERN, Geneva*, Main developer of the TRACS, simulator for irradiated silicon detectors.
- 2016 **Internship at**, *CERN*, *Geneva*, In charge of controlling gas mixtures inside selected gaseous CERN-LHC detectors and providing technical assistance..

Journalism

2012–2014 Android Blog Journalist, El Androide Libre.

News and tutorials specialist for El Androide Libre (currently El Español)

2014–2017 **Science Blog Journalist**, *Medciencia*.

Sciene communication for Medciencia, (currently El Español)

Community

2013-2017 Founder and member of the Physics Mentor Group, UC, Santander.

Sports related

2007-2015 Handball Referee, 8 years of handball refereeing,

Highest Level: Primera División (National) (2011-2014).

2009–2010 Handball coach of a kids team.

Hard skills

English C1 Level

Cambridge Certificate in Advance English obtained in May 2010

Computer Intermediate level, Used to working with different operating systems, office suites

skills and text editors (including VIM and other IDEs)..

Basic-Intermediate level, Experience with coding in different languages (C++, python, javascript).

Often used for creating tools to automate daily repetitive tasks

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...

Soft skills

Problem **High level**, Experienced and trained in finding new solutions to problems thanks to solving the multidisciplinary background and critical thinking..

Very eager to improve processes and workflows

Communication **High level**, Experience in adapting communication style based on the context and making sure everyone is on the same page.

Keen and experienced in public speaking and debating.

Group leading **High level**, Great at leading and motivating multicultural and multidisciplinary teams.

Experience leading small multicultural and interdisciplinary groups

Organization Intermediate level, Strong ability to create effective organisational systems and workflows.

Difficulty staying organised and dealing with bureaucracy

Appendix with links to relevant information

References and Publications

Academic

- Personal GitHub (https://github.com/AIGepe)
- 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 (http://cds.cern.ch/record/2042184)
- Bachelor thesis (tex format): https://github.com/AIGepe/TFG
- Publication:
 - "TRACS: A multi-thread transient current simulator for micro strips and pad detectors"

(https://www.sciencedirect.com/science/article/pii/S0168900218317856)

Journalistic Publications

- Spanish articles published on Android news and science communication (https://www.elespanol.com/autor/alvaro_diez/)
- Calculator featured on Nature (https://www.nature.com/articles/d41586-019-03889-3)
- Calculator featured on Forbes (https://www.forbes.com/sites/jeanettehurt/2019/08/12/warsaw-physicist-creates-calculator-for-cooling-drinks)
- Example of the calculator featured on national TV (https://www.antena3.com/programas/espejo-publico/noticias/omnicalculator-la-app-que-te-muestra-tu-turno-de-vacunacion-contra-elcoronavirus_202101216009654019cdca0001d04e08.html)