

#Forestry #Research #GIS #Remote Sensing #LiDAR

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## Profile & Objective

I am a dynamic and versatile Forest Engineer from Spain with more than 10 years of diverse and wide experience in GIS and remote sensing. I have been working lately on research projects involving LiDAR, biomass and R language. I have experience working internationally, in different fields related to technology and interdisciplinary teams. I have great ability to learn, and I have an analytical mind. I am mainly looking for challenging projects related to GIS, remote sensing technologies and new ways to acquire data where I can use my background and skills, learning new ones in the process.

## Education

**Ongoing: MSc. iGEON. Master of Science in Geographic Information Science (GIS) and Earth Observation for Environmental Modeling and Natural Resource Management.** (120 ETCS | Online) (<http://www.igeon.eu>)  
Lund University (Sweden) and University of Twente (Netherlands)

**2012: Degree in Forestry and Environmental Engineering** (240 ETCS), University of León, Spain.

**2008: Bachelor of Agricultural Engineering (Forestry)** (180 ETCS), University of León, Spain.

## Experience

**2015-2017: University of Eastern Finland. Various LiDAR projects. 9 months.**

- Download, processing and analyzing the whole LiDAR information of Finland using Fusion, LAStools and others.
- Scripting in R language to process and analyze LiDAR data. Statistical modeling to yield biomass estimations.
- Reference research and scientific writing about LiDAR and biomass estimation.

**Nov 2014: Metsäkeskus. Finnish language course internship. Creation of digital cartography**

- Analyzing and processing Metsäkeskus' inventory data in Finnish to create digital cartography.

**2014-2016: Intensive Finnish Language Courses.**

- I took 3 courses, which were more than 1500 hours in total, about Finnish language and culture

**May 2009 – Dec 2012: Fundación Ciudad de la Energía (City of Energy Foundation), Spanish Government.**

- Last position: Coordinator of **Technology & Innovation Area at Technology & Systems Department**
- Leader of a multidisciplinary team of four members related to technology and programming.
- Co-responsible to commission the digital platform for the *Ene. Museo Nacional de la Energía*. 1-million-euro project.
- Develop, implement and commission different kinds of **technological systems** such as public Wi-Fi networks, ticket-selling systems, geolocation systems for people and objects, and cloud computing systems.
- Responsible of the **Geographic Information Systems (GIS)**. Cartography elaboration (such as two tourism maps, web apps or in-house cartography), data analysis, geodatabase keeping and in-house GIS training.
- Responsible of the office tasks of **"Current pest measurement of European chestnut from El Bierzo (León, Spain)"** project; managing field work, inventory operations, and data processing and analysis.
- Collaborator in several projects:
  - **Heritage Inventory of El Bierzo and Laciana Counties**. Helping to plan field works, develop the inventory and coordinate and create a database. Also, subsequent analysis of data using GIS methodologies.
  - **La Mirada Circular** (more than 300 km of hiking routes): Help to organize activities, signaling, mapping and managing.
  - Lots of other activities about environment, alternative and clean energies, tourism and territory analysis.

**2009: Freelance consultant for TRAGSATEC; collaborate in the preliminary plan for the Pajariel Forestry Park.**

- Collecting data in field, team organization, and cartography elaboration.
- GIS multi-criteria analysis of data, develop and analysis proposals of restoration and activities for the park.
- Analysis of potentialities and the development of citizen participation process.

**2005-2011: Several projects as freelance such as:**

- Development of Geographic Information Systems in **ArcGIS, ArcPAD & ArcView** and blueprints in **AutoCAD**.
- Experience as a judicial expert in court and writing a judicial report for one side.

**2007-2008: Ponferrada Municipality (9 months) at the project "Integral Management of the Ponferrada's Mountains". Forest and office technician and consultant:**

- Forest inventory of more than 12000 ha, in-filed decision making about forest management and GIS analysis of data.
- Co-writing of strategic management report for the forest for the following 10 years.

## 2006: Tecnosylva SL. (6 months). Forest technician and consultant:

- Inventory of forest roads, with GPS, ArcPAD, and off-road vehicle. Over 2000 km.
- Cartography generation and digitalization in ArcGIS software.
- Collecting data in field with professional GPS. Advanced knowledge of GPS methodology.
- Forest inventory with computing systems such PDA, Vertex, and electronic caliper.

## Additional Training

- 300 hours of training courses on **ArcGIS 10 Desktop and Server** systems, including Oracle DDBB and programming in python and add-ins, by ESRI Spain
- Course **Sextante** (GIS toolbox) by Uni. of León (20 hours).
- Course **“Thematic Cartography”**, by the Spanish National Geographic Institute (40 hours).
- Course of **“Learn to Program: The Fundamentals”** in Python, by University of Toronto (50 hours).
- Course **“Certification and Audition Systems** in forest exploitations” by PROFOR (144 hours).
- Course of **Fire Management**, by Swedish University of Agricultural Sciences (SLU) (200 hours).
- Course **AutoCAD 2011** 2D & 3D, by IFESS (40 hours).
- Course **“Health and Safety** on forest exploitations” by PROFOR (144 hours).
- Course **“Defending Forest Against Wildfires”**, by the Spanish Forest Engineers Official Association (30 hours).
- Course about **Biomass** by CARTIF Foundation (60 hours).
- Course **“Forest Planning”**, by Castile and León Government (50 hours).
- Course on **Project Management** by Adecco (15 hours)
- Course of **Wonderware** by Wonderware Spain (35 hours).
- I’ve assisted to many others talks, seminaries, conferences and congresses at local, national and international level.

## Languages

- Spanish: Native Speaker
- English: Advanced level. TOEFL iBT score 96
- Finnish: A2
- Swedish: A1

## Computing Skills

- ArcGIS
- AutoCAD
- Photoshop
- Experience in Mac OS X, Windows & Linux environments
- Experience in scripting, databases and web developing
- R (statistical language)
- Fusion
- Git and version control

## Complementary Activities

- Self-learner about Project Management and personal Productivity. Curious about “Fifth Discipline”, “Systems Thinking”, “Learning Organizations”, new ways of learning and similar subjects.
- Very interested in social media and the new ways of communicating ideas.
- Science and technology lover. Rational thinker. Always trying to implement technology to be me more efficient.
- Photography enthusiasm and eager learner of almost everything.
- I like the adventure, hiking and camping in the wilderness.
- Volunteering in the Albany Historic Carrousel

## Other Data

- International driving license and off-road experience
- Availability for traveling all around the world

## References

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