

# Lluís Ramon Callao

## *Curriculum vitae*

Melcior de Palau 25

Barcelona 08028

609236313

✉ lluisramon.tgn@gmail.com

in Lluís Ramon

🌐 LluísRamon



## Education

- 2013 - 2016 **Master in Statistics and Operations Research**, *Universitat Politècnica de Catalunya - Universitat de Barcelona*, Barcelona.
- 2002 - 2007 **Degree in Mathematics**, *Universitat Politècnica de Catalunya*, Barcelona.  
Degree that included a wide range of courses in several areas of knowledge:
- Pure and Applied Mathematics (Algebra, Geometry, Mathematical Modelling, Real Analysis, Differential equations).
  - Statistics (Operations Research, Statistical Inference).
  - Computing (Algorithmics, Programming, Numerical Analysis).
- Feb. - Jun. 2007 **Socrates-Erasmus Exchange Program**, *Université Pierre et Marie CURIE*, Paris.
- Modules taught entirely in French.
  - Attended Mathematical optimization, Epidemiology and Functional analysis.

## Experience

- Dec. 2007 - Present **Road Safety and Traffic Management Engineer**, *Servei Català de Trànsit, Generalitat de Catalunya*, Barcelona.
- Statistical analysis and reporting with R in the following fields:
    - Road safety
    - Breath alcohol content enforcement
    - Speed
    - Mobility
    - Traffic congestion
    - Relationship between mobility and accidents
  - Preparation of contract specifications for hiring external studies. Project management and final document supervision.
  - Participation in European projects and proposals to the European Commission.
  - Studying and proposing policies in the frame of the Catalan road safety plan.
  - Data analysis and database management with SQL of the following DBs:
    - Road accidents (24.000 entries/year on 180 variables)
    - Road mobility (4.000.000 entries/year on 20 variables)
    - Breath alcohol content enforcement (600.000 entries/year on 15 variables)
    - Traffic congestions (24.000 entries/year on 25 variables)
  - Development of a package in the R programming language to automate the following tasks:
    - Connection and data collection from DataWareHouse
    - Specialized functions for road safety and mobility data processing
    - Geographical representation of information and map generation
    - Mathematical-statistical model to treat mobility data
    - Mathematical-statistical model to treat speed data
    - Automatic report generation
- Jun. 2015 **R Programming Course**, *Datosphera*, Barcelona.  
16 hours training to the technical team at Datosphera in R programming. The course was adapted to the needs of the company and to solve their data problems.

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## Languages

Catalan	Native proficiency
Spanish	Native proficiency
English	Full professional proficiency
French	Elementary proficiency

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## IT Skills

Programming	SQL, Python, TEX, Git.
Data Analysis	R, Matlab, SPSS.
OS	Windows, Mac, Linux.
BI	Microstrategy.

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## Courses

Apr. 2012	<b>Programming a Robotic Car</b> , <i>Udacity</i> , Online.
Mar. 2011	<b>Survey sampling design and analysis</b> , <i>Institut d'Estadística de Catalunya</i> , Barcelona.
Sep. 2010	<b>Public Contracts Specification</b> , <i>Escola d'Administració Pública de Catalunya</i> , Online.
Sep. 2009	<b>Agata GIS</b> , <i>Servei Català de Trànsit</i> , Barcelona.
May 2009	<b>Microstrategy Desktop</b> , <i>Microstrategy Business Intelligence</i> , Barcelona.
Apr. 2008	<b>Aimsun Foundation Course</b> , <i>Transport Simulation Systems</i> , Barcelona.
Feb. 2008	<b>Certificate of Pedagogical Aptitude</b> , <i>Universitat Politècnica de Catalunya</i> , Barcelona.

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
## Publications

Apr. 2014	<b>Prevalence of alcohol-impaired drivers based on random breath tests in a roadside survey in Catalonia (Spain)</b> <a href="#">↗</a> , <i>Manuela Alcañiz, Montserrat Guillén, Miguel Santolino, Daniel Sánchez-Moscona, Oscar Llatje, Lluís Ramon</i> , Accident Analysis & Prevention.
Apr. 2013	<b>Relationships flow/speed (congestion) on the arterial road network to Barcelona</b> <a href="#">↗</a> , <i>Òscar Llatje, Enric Homedes, Ferran Muñoz, Lluís Ramon</i> , Revista Carreteras, Asociación Española de la Carretera.

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## Presentations

Jan. 2016	<b>Setting Rstudio Server using Amazon Web Services</b> <a href="#">↗</a> , <i>Lluís Ramon</i> , Barcelona R user's group, Barcelona.
Nov. 2015	<b>Step by step introduction to R</b> <a href="#">↗</a> , <i>Lluís Ramon</i> , Barcelona R user's group, Barcelona.
Jul. 2015	<b>Package development tutorial</b> <a href="#">↗</a> , <i>Lluís Ramon</i> , Barcelona R user's group, Barcelona.
Feb. 2015	<b>Automatic Reporting with rmarkdown</b> <a href="#">↗</a> , <i>Carlos Bort &amp; Lluís Ramon</i> , Barcelona R user's group, Barcelona.
Apr. 2014	<b>Introduction to maps with R</b> <a href="#">↗</a> , <i>Lluís Ramon</i> , Barcelona R user's group, Barcelona.
Feb. 2014	<b>Easy Dates and Times in R</b> <a href="#">↗</a> , <i>Lluís Ramon</i> , Barcelona R user's group, Barcelona.
Apr. 2013	<b>Easy package development with RStudio</b> , <i>Lluís Ramon</i> , Barcelona R user's group, Barcelona.
Nov. 2012	<b>A practical introduction to ggplot2 and ggmap</b> <a href="#">↗</a> , <i>Andreu Vall, Roger Borrás, Lluís Ramon</i> , IV Spanish R User Conference, Barcelona.

- Oct. 2012 **Introduction to maps with R**  , *Lluís Ramon*, Barcelona R user's group, Barcelona.
- Jun. 2012 **Introduction to R**, *Lluís Ramon*, Barcelona R user's group, Barcelona.
- Feb. 2012 **Data transformations with R**, *Lluís Ramon*, Barcelona R user's group, Barcelona.
- Oct. 2009 **SIDAT: A comprehensive system for collecting road accidents data**, *Lluís Ramon*,  
1st Meeting on Road Safety for Cities, Gijón.