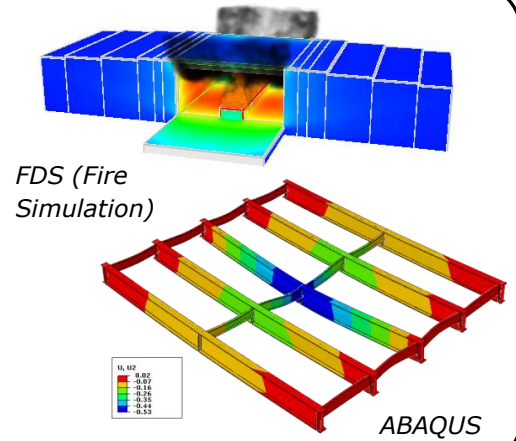




- **Current Place of Residence:** Valencia - Spain
- **Date of birth:** June 17<sup>th</sup> 1989
- **Citizenship:** Spanish
- **Languages:** English, Italian, Spanish, Catalan
- **Phone number:** +34 666 184 251
- **E-mail:** [guillemperis@gmail.com](mailto:guillemperis@gmail.com)
- **Driving License – Personal Vehicle**

# Guillem Peris Sayol



## EDUCATION: Spanish Civil Engineering Degree & Ph.D Student

Dec. 2013 –  
Act.

### Ph.D Program in Construction Engineering (Valencia, Spain)

**Universitat Politècnica de Valencia (U.P.V)** – Ph.D program in Civil Engineering. Dept. of Construction Engineering.

**Thesis Name:** “Analysis of the fire response of multi girder short span steel bridges”

**Specialist in:** CFD, Fire Dynamics Simulations (FDS), mechanical fire response of a bridge, steel damage due to high temperatures, numerical models in Abaqus, graphic design with Rhinoceros, programming in Visual Basic and Python.

Sep. 2007 –  
Sep. 2013

### Spanish Civil Engineering Education (Valencia, Spain)

**Universitat Politècnica de València (U.P.V)** – Ingeniería de Caminos Canales y Puertos

**Specialization:** “Structural Engineering”.

**Extensive studies of:** bridges, building structures analysis and design, steel constructions, concrete structures, train and railway structural elements design, sanitary engineering, fluid mechanics, hydraulic designs, safety and risk prevention, projects management.

Sep. 2012 –  
Jun. 2013

### Erasmus: Final Year Undergraduate Project (Trieste, Italy)

**Università Degli Studi di Trieste – Final Project (Thesis)**

**Thesis Name:** “Analysis of the collapse of the overpass located between Hodge and Bayard streets due to a tanker truck fire in Princeton, NJ, USA”.

**Focus Area:**

**Fire Dynamics Simulations (FDS):** Fire modeling and condition in the structure.

**Abaqus:** Analysis of a bridge: heat transfer and mechanical response.

## WORK EXPERIENCE:

Jun. 2013 –  
Jul. 2014

### ICITECH

**Universitat Politècnica de València (Valencia, Spain, 1 year)**

**Research Group:** Bridges in Fire

**Principal Investigator:**

Ignacio Javier Payà Zaforteza, professor in Universitat Politècnica de Valencia.

**Focus Area:** Analysis of the structural behavior of steel girder bridges due to fire. The analyses use computational fluid dynamics (CFD) to create the fire model, and finite element (FE) software for obtaining the thermo-mechanical response of the girder.

Jan. 2012 –  
Jul. 2012

### Engineering department of Transport and Infrastructure

**Universitat Politècnica de València (Valencia, Spain, 7 months)**

**Project Name:** “Methodology to obtain traffic intensities from satellite pictures”.

**Principal Investigator:**

Alfredo García García, professor in Universitat Politècnica de Valencia

**Focus Area:** Satellite technology (State-of-the-Art), Google Earth, Velocity estimation from Google Earth, Traffic intensities (AADT), Programming.

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## PUBLICATIONS:

Jun. 2013	<b>Numerical analysis of the thermal and structural response of a multi-girder steel bridge in real fire conditions</b> <b>2<sup>nd</sup> International Congress on Mechanical models in structural engineering (University of Granada)</b> <i>This paper examines the response of a 12.2m span steel girder bridge to several real fires caused by a tanker truck and discusses aspects of numerical modeling and influence of tanker position and magnitude of overload.</i>
Feb. 2014	<b>A parametric study on the thermo-mechanical response of a multi-girder steel bridge submitted to real fires</b> <b>Informes de la Construcción 2014:66 (NºExtra-1)</b> <b><a href="http://dx.doi.org/10.3989/ic.13.077">http://dx.doi.org/10.3989/ic.13.077</a> (Accepted, waiting publication)</b> <i>The study analyzes modeling features as well as the influence of the position of the tanker and the existence of gas spills.</i>
Jun. 2014	<b>Analysis of the response of a steel girder bridge to different tanker fires depending on its structural boundary conditions</b> <b>8<sup>th</sup> Conference on Structures in Fire, Shanghai, China (SIF'14)</b> <i>This paper presents an approach to evaluate the fire response of the most exposed girder of a simply supported steel girder bridge designed by the Federal Highway Administration (FHWA) of the USA spanning 12.2 m under three different fire scenarios.</i>
Jun. 2014	<b>Bridges in fire. A parametric study on the thermo-mechanical response of a multi-girder composite bridge.</b> <b>VI ACHE Congress</b> <i>This paper examines the response of a 24.8m span composite bridge to different real fires (tanker truck, truck) centered under the structure.</i>
Jul. 2014	<b>A parametric study of a steel girder bridge to realistic fire scenarios</b> <b>Computers &amp; Structures (Submitted September 2014)</b> <i>A parametric study on the structural response in front of multi-girder steel bridge against a tanker fire. This paper analyze the influence of the vertical clearance, abutments, wind and tanker position.</i>

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## LANGUAGES:

- **English:** Professional competence (B2-C1). 3 months studying in Toronto (Canada)
- **Italian:** Professional competence (B2-C1). 9 months studying in Trieste (Italy)
- **Spanish:** Mother Language
- **Catalan:** Mother Language

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## SOFTWARE:

- **Structures:** ABAQUS, Sap2000, Ansys, Cype.
- **Computational Fluid Dynamics (CFD):** FDS, Pyrosim, SmokeView.
- **Programming:** Visual Basic, Python, Matlab.
- **Office:** Word, Excel, Powerpoint, Project, Latex.
- **CAD:** AutoCad, Rhinoceros.
- **Others:** Google Earth, MathCad, Mathematica, Epanet, SWMM, DESSAS, ArcGis.

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## OTHER ACTIVITIES AND INTERESTS

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|--------------------|---|
| <b>Other Works</b> | <ul style="list-style-type: none"><li>• Coach of a 7-year-old children football team in the U.D. Alzira (2008).</li><li>• Private tuition for student (2013-2014).</li></ul>  |
| <b>Trips</b>       | <ul style="list-style-type: none"><li>• Canada, USA, Italy, Slovenia, Austria, Czech Republic, Germany, France.</li><li>• Holland, Belgium, Poland, Portugal, Slovakia, Hungary, Spain.</li><li>• Founder and guitarist of an alternative rock band Black Lemurs (2013-Act.).</li></ul> |
| <b>Hobbies</b>     | <ul style="list-style-type: none"><li>• Sports: Football (12 years), Tennis (3 years).</li><li>• Travel, hiking, music production.</li></ul>  |
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