




# Berta Bescós Torcal



## Contact

  
 Ave G. Gómez de  
 Avellaneda 27 4°C  
 Zaragoza, 50018  
 Spain

  
 (+34) 664 339 068

  
 bbescos@unizar.es

  
[linkedin.com/in/bbescos](https://www.linkedin.com/in/bbescos)

  
[github.com/bertabescos](https://github.com/bertabescos)

  
[bertabescos.github.io](https://github.com/bertabescos)

## Experience

- 2017–Now **University of Zaragoza** Zaragoza, Spain  
*PhD. Student in Computer Vision*  
 I am currently PhD. Student in Computer Vision and Robotics at the Computer Science Department at the University of Zaragoza advised by Dr. José Neira . My main research interests lie in the intersection between perception and learning for robotics. The world surrounding us is complex and ever changing, which makes robots struggle to have a good understanding of the scene. My PhD. topic involves dealing with dynamic objects in Simultaneous Localization and Mapping problems for a better scene understanding with both geometry and semantics.  
 Remarkable achievements:
- Research stay in Autonomous Systems Lab (ASL) in ETH Zürich, Switzerland for 5 months. My supervisors are César Cadena and Roland Siegwart
  - Attendance to RVSS in Kioloa, Australia.
- 2015 **Fersa Bearings** Zaragoza, Spain  
*Engineer Jr. in R&D department*  
 I had a 6 months internship in Fersa's R&D department. The role I had to play in the company was the development of new aftermarket and T1 products.
- 2015 **SARGA** Zaragoza, Spain  
*Basic Technician in Safety and Prevention of Labor Risks*  
 I updated the self-protection and emergency plan of the public company SARGA.
- 2010–2017 **Mis Clases Particulares** Zaragoza, Spain  
*Private Teacher*  
 I have been working as a private teacher of English, French and science subjects for students who aim to access university (e.g., Chemistry, Physics, Maths, Drawing).

## Education

- 2015–2017 **Master's Degree in Industrial Engineering, Robotics and Automation** Universidad de Zaragoza
- 2016–2017 **Master's Degree in Electronics and Automation** INSA Lyon  
 I spent 6 months at INSA Lyon (Lyon, France) under the Erasmus exchange program.
- 2011–2015 **Bachelor's Degree in Industrial Engineering** Universidad de Zaragoza
- 2014–2015 **Master's Degree in Systems, Control and Mechatronics** Chalmers University of Technology  
 I spent 6 months at Chalmers University of Technology (Göteborg, Sweden) under the Erasmus exchange program.

## Publications

- Empty Cities: Image Inpainting for a Dynamic-Object-Invariant Space  
**B. Bescos**, J. Neira, R. Siegwart, C. Cadena. Submitted to ICRA 2019
- Dynamic Objects Segmentation for Visual Localization in Urban Environments  
 G. Zhou, **B. Bescos**, M. Dymczyk, M. Pfeiffer, J. Neira, R. Siegwart. IEEE Workshop on From Freezing to Jostling Robots: Current Challenges and New Paradigms for Safe Robot Navigation in Dense Crowds, held with IROS 2018.
- DynaSLAM: Tracking, Mapping and Inpainting in Dynamic Scenes  
**B. Bescos**, JM. Fácil, J. Civera, J. Neira. Published at RA-L and IROS 2018.
- Detecting, Tracking and Eliminating Dynamic Objects in 3D Mapping using Deep Learning and Inpainting

**B. Bescos**, JM. Fácil, J. Civera, J. Neira. IEEE Workshop on Representing a Complex World: Perception, Inference, and Learning for Joint Semantic, Geometric, and Physical Understanding, held with ICRA 2018.

- Removing Dynamic Objects from 3D Maps using Geometry and Learning

**B. Bescos**, JM. Fácil, J. Civera, J. Neira. IEEE Workshop on Learning for Localization and Mapping, held with IROS 2017.

## Languages

**Spanish:** Native proficiency

**English:** Full professional proficiency – I got C1 Cambridge English certificate in 2016

**French:** Full professional proficiency – I got B2 EOI French certificate in 2017

**German:** Basic communication skills – I am currently learning german

## Volunteering Experience

2016	<b>Reconstruction of a school in India</b> FSL India Dharamsala, India I worked for one month, together with an international team, in the reconstruction of a school for Tibetan refugees in Dharamkot, Himachal Pradesh, India.
2015	<b>Reconstruction of a mountain shelter</b> Solidarités Jeunesses Vaunières, France I helped carry out the reconstruction of a mountain shelter in the French Alps for hosting people with disabilities and young people at risk of social exclusion.
2013	<b>Reconstruction of a watermill in Estonia</b> EstYES Viljandi, Estonia I worked together with international people on the reconstruction of a watermill in Viljandi, Estonia, for the supply of the area with electrical energy.