Clara Fernández-Labrador

Email: cfernandez@unizar.es
Phone: (+34) 606 23 74 35
Homepage: `https://cfernandezlab.github.io/`

Education

Universidad de Zaragoza, Spain / **Université de Bourgogne Franche-Comté**, France   Oct 2017 - Now
Ph.D. in Computer Vision
Advised by Dr. José J. Guerrero Campo and Dr. Cédric Demonceaux
Summer School on Computer Vision - ICVSS 2018 (34%)

Politecnico di Torino, Italy   Sep 2016 - Mar 2017
Visit during Bachelor of Industrial Engineering
Funded by EU Erasmus Program

Università degli studi di Trieste, Italy   Sep 2014 - Jun 2015
Visit during Master of Industrial Engineering
Funded by EU Erasmus Program

Universidad de Zaragoza, Spain
Master of Industrial Engineering   Sep 2015 - Oct 2017
Thesis title: "3D Room Layout Estimation from a Single 360º Panorama"
Advised by Dr. José J. Guerrero Campo and Dr. Alejandro Pérez Yus

Bachelor of Industrial Engineering   Sep 2011 - Sep 2015
Thesis title: "Design and Organization for the Machines Control in a Company"
Advised by Dr. Ángel Fernández Cuello and Dr. Nicolich Marino

Work Experience

Universidad de Zaragoza, Spain
Research Assistant - Ms. Candidate – PhD Candidate   Oct 2017 - Now
Robotics, Perception & Real Time Group.
Research Project: "DPI2015-65962-R: Egocentric Computer Vision for Environment Interaction of Visually Impaired People, EVEIVI"
Research in Computer Vision and Robotics: Complex scene analysis with non-conventional cameras for robotics and people assistance. Geometry and deep learning combination.

Research Assistant - Ms. Candidate   Mar 2017 - Oct 2017
Robotics, Perception & Real Time Group.
Research Initiation Scholarship
Research Project: "DPI2014-61792-EXP: Sistemas de visión no convencionales para percepción en prótesis de visión simulada"
Research in Computer Vision and Robotics: 3D layout recovery of indoor scenes from single 360 degrees panoramas. Geometry and deep learning combination.

Colombin GM & Figlio Spa, Trieste, Italy   Mar 2015 - Jul 2015
Undergraduate Intern - Bs. Candidate
Project management. Bottlenecks and personal protective equipment (PPE) managing.

Tecnopackaging, Zaragoza, Spain   May 2014 - Aug 2014
Undergraduate Intern - Bs. Candidate
3D CAD design and injection simulations in prosthetics with biocompatible plastics.

Languages

English - First Certificate (B2). Currently preparing Cambridge Advanced (C1)
Italian - CILS Livello TRE (C1)
French - Lower Intermediate
Spanish - Mother tongue

Publications

Journals

[1] "Layouts from Panoramic Images with Geometry and Deep Learning"
Clara Fernández Labrador, Alejandro Pérez Yus, Gonzalo López Nicolás, José J. Guerrero
IEEE Robotics and Automation Letters, 2018
With IROS 2018 Presentation

International Conferences and Workshops

[1] "PanoRoom: From the Sphere to the 3D Layout"
Clara Fernández Labrador, J. María Fácil, Alejandro Pérez Yus, Cédric Demonceaux, José J. Guerrero
3DRMS with ECCV 2018. Munich, Germany.

[2] "Full 3D Layout Reconstruction from One Single 360° Image"
Clara Fernández Labrador, Alejandro Pérez Yus, Gonzalo López Nicolás, José J. Guerrero
WiCV with ECCV 2018. Munich, Germany.
ICVSS 2018. Sicily Italy.

Jornadas de Investigación

[1] "Reconstrucción 3D completa de habitaciones a partir de imágenes panorámicas"
Clara Fernández Labrador, Alejandro Pérez Yus, Gonzalo López Nicolás, José J. Guerrero
VII Jornada de Jóvenes Investigadores del Instituto de Investigación en Ingeniería de Aragón (I3A) 2018.
Zaragoza, Spain.

Supervised Bachelor/Master thesis projects

- "Layout reconstruction with single view"
  Juan Carlos Medina. Co-supervised with Dr. José J. Guerrero Campo.
  Bs. Industrial Eng., University of Zaragoza. 2018

- "Object recognition in 360 images"
  Julia Guerrero Campo. Co-supervised with Dr. José J. Guerrero Campo.
  Bs. Computer Science, University of Zaragoza. 2019

Research Projects

- Egocentric Computer Vision for Environment Interaction of Visually Impaired People (EVEIVI), DPI2015-65962-R. Financed by MINECO and UE/FEDER. P.I.(principal investigator): José J. Guerrero

- Sistemas de visión no convencionales para percepción en prótesis de visión simulada, DPI2014-61792-EXP. Financed by MINECO and UE/FEDER. P.I.(principal investigator): Gonzalo López Nicolás