

Melani Sánchez García

Contact information:

mesangar@unizar.es (work e-mail)

mesangar6@gmail.com

(personal e-mail)

(+34) 639 54 16 21

<https://mesangar.github.io/>

Current Address:

C/ Crist de l'Empar 6

Gandia

46702 Valencia, Spain

Current position:

PhD Student at

Universidad de Zaragoza

EDUCATION

PhD studies in Computer Vision

Oct 2017 - present

Computer Science and Systems Engineering Dept.,

Universidad de Zaragoza – Spain

Advisors: Dr. Jose Jesús Guerrero Campo and Dr. Rubén Martínez Cantín

Thesis title: “Egocentric computer vision for the interaction with the environment of people with visual disability”

Teaching

Sep 2020 - Dic 2020

Master of Engineering in Industrial Engineering

Subject of Visión y Robótica

Universidad de Zaragoza – Spain

Teaching

Feb 2019 - April 2019

Master of Engineering in Industrial Engineering

Subject of Representación gráfica del patrimonio

Universidad de Zaragoza – Spain

Summer School on Computer Vision (BMVA 2018)

July 2018

Norwich - UK

Subject of Vision and Robotics

Sep 2017 - Jan 2018

Master of Engineering in Industrial Engineering (GPA: 7.5/10)

Universidad de Zaragoza – Spain

Advisors: Dr. Jose Jesús Guerrero Campo and Dr. Gonzalo López Nicolás

Master of Chemical Engineering (GPA: 7.75/10)

Sep 2015 - May 2017

Universitat de València – Spain

Master's degree final project title: “Elimination of a representative VOC by total oxidation using catalysts”

Advisor: Dr. Benjamín E. Solsona Espriu

Bachelor of Chemical Engineering (GPA: 7.66/10)

Sep 2011 - May 2015

Universitat de València – Spain

Final degree project title: “Design of catalytic converters in exhaust pipes”

Advisor: Dr. Benjamín E. Solsona Espriu

SCHOLARSHIPS

FPI scholarship (PhD candidate)

Oct 2017

Research staff training program from the Ministry of Economy and Competitiveness for I+D+i

Universidad de Zaragoza – Spain

Research Project: “DPI2015-65962-R”

WORK EXPERIENCE

Visit Researcher

May 2021 - June 2021

Prof. Eduardo Fernández Jover

Instituto de Bioingeniería

Universidad Miguel Hernández

Visit Researcher

Sep 2019 - Dec 2019

Prof. Benoit Cottureau and Christophe Jouffrais

IRIT and CerCo labs

University of Toulouse

Research Engineer

May 2017 - Oct 2017

Robotics, Perception & Real Time Group

Universidad de Zaragoza – Spain

Research Project: “DPI2015-65962-R”

Research in Computer Vision and Robotics: Egocentric computer vision for the interaction with the environment of people with visual disability

Research Assistant

Sep 2016 - May 2017

Engineering Department

Universitat de València – Spain

Research in Carboquímica: Elimination of a representative VOC by total oxidation using catalysts

PUBLICATIONS

JOURNALS, INTERNATIONAL CONFERENCES AND WORKSHOPS

- [1] “Influence of field of view in visual prostheses design: Analysis with a VR system”

Melani Sánchez García, Rubén Martínez Cantín, Jesús Bermudez Cameo and Jose J. Guerrero

Journal of Neural Engineering

Published: October 7, 2020

- [2] “Semantic and Structural Image Segmentation for Prosthetic Vision”

Melani Sánchez García, Rubén Martínez Cantín and Jose J. Guerrero

PLOS ONE Journal

Published: January 29, 2020

- [3] “Indoor Scenes Understanding for Visual Prosthesis with Fully Convolutional Networks”

Melani Sánchez García, Rubén Martínez Cantín and Jose J. Guerrero

VISAPP 14th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications, 22, October 2018

- [4] “Structural and object detection for phosphene images”

Melani Sánchez García, Rubén Martínez Cantín and Jose J. Guerrero

Published in Arxiv, 25, September 2018

- [5] “Smart Representation of Indoor Scenes under Simulated Prosthetic Vision”
Melani Sánchez García, Rubén Martínez Cantín and Jose J. Guerrero
WiCV Women in Computer Vision Workshop, 15th European Conference on Computer Vision (ECCV), 9,
September 2018

SUPERVISED BACHELOR/MASTER PRACTICUM SUPERVISOR

- Lorenzo Labadial Mur. Co-supervised with Rubén Martínez Cantín. Bs. Industrial Eng. Universidad de Zaragoza. 2020-2021
- Violeta Estepa Ramos. Co-supervised with Rubén Martínez Cantín. Bs. Industrial Eng. Universidad de Zaragoza. 2019-2020
- María Santos Villafranca: “Simulador de prótesis visual en entornos 360° con gafas de realidad virtual”. Co-supervised with Jose Jesús Guerrero Campo. Bs. Industrial Eng. Universidad de Zaragoza. 2018-2019
- Pedro Luis Compais Serrano: “Sistema de asistencia a la navegación basado en la cámara de eventos”. Co-supervised with Jose Jesús Guerrero Campo and Rubén Martínez Cantín. Bs. Industrial Eng. Universidad de Zaragoza. 2018-2019

PARTICIPATION IN RESEARCH REVISIONS

- [1] External Reviewer in Journal of Neural Engineering, 2020
- [2] External Reviewer in ICRA IEEE International Conference on Robotics and Automation - 2020, Paris, Virtual Conference, IEEE Robotics and Automation Society.
- [3] External Reviewer in ACVR Sixth International Workshop on Assistive Computer Vision and Robotics, 9, September 2018

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): Jose J. Guerrero

OTHER ACTIVITIES

- “Influence of Field of View in Visual Prostheses Design: Analysis with a VR System”
Presented at IX Jornada de Jóvenes Investigadores del I3A, 2020
- I was featured in Ágora, which is the Aragón Radio program dedicated to popular science.
- I participated in the initiative ‘Una ingeniera en cada cole’ (AMIT)
- “Semantic and Structural Image Segmentation for Prosthetic Vision”
Presented at VIII Jornada de Jóvenes Investigadores del I3A, 2019

LANGUAGES

English — Fluent (C1)
German — Basic (A1)
Spanish — Native