



**Francisco Díaz Barrancas**

Generated from: Editor CVN de FECYT

Date of document: 26/02/2021

**v 1.4.3**

ba2f39cde661f351e894fbd978b008dd

This electronic file (PDF) has embedded CVN technology (CVN-XML). The CVN technology of this file allows you to export and import curricular data from and to any compatible data base. List of adapted databases available at: <http://cvn.fecyt.es/>



## Summary of CV

This section describes briefly a summary of your career in science, academic and research; the main scientific and technological achievements and goals in your line of research in the medium -and long- term. It also includes other important aspects or peculiarities.

**Francisco Díaz-Barrancas** received the B.S degree in computer engineer in 2017 and the M.S degree in computer technologies research in 2018, both from the University of Extremadura (UEX), Mérida, Spain. He is currently working toward the Ph.D. degree in the visual appearance in virtual reality devices.

He is a Research Assistant at the University of Extremadura (UEX) in Spain. He has been involved in several projects related to application of hyperspectral and virtual reality techniques to measure the color performance of LED light sources.



## Francisco Díaz Barrancas

Surname(s): **Díaz Barrancas**  
Name: **Francisco**  
ORCID: **0000-0002-4930-4780**  
Date of birth: **01/07/1995**  
Gender: **Male**  
Nationality: **Spain**  
Country of birth: **Spain**  
Aut. region/reg. of birth: **Extremadura**  
City of birth: **Badajoz**  
Contact aut. region/reg.: **Extremadura**  
Email: **frdiaz@unex.es**  
Personal web page: **<https://francisco-diaz-barrancas.github.io/>**

### Current professional situation

**Employing entity:** Universidad de Extremadura **Type of entity:** University  
**Department:** Expresión Gráfica, Centro Universitario de Mérida  
**Professional category:** Personal de Apoyo a la Investigación  
**City employing entity:** Merida, Extremadura, Spain  
**Email:** frdiaz@unex.es  
**Start date:** 01/10/2020  
**Type of contract:** Temporary employment contract **Dedication regime:** Full time  
**Field of management activity:** University

### Previous positions and activities

	Employing entity	Professional category	Start date
	Universidad de Extremadura	Personal Científico e Investigador	19/10/2017

**Employing entity:** Universidad de Extremadura **Type of entity:** University  
**Department:** Ingeniería en sistemas informáticos y telemáticos, Centro Universitario de Mérida  
**City employing entity:** Merida, Extremadura, Spain  
**Professional category:** Personal Científico e Investigador  
**Email:** frdiaz@unex.es  
**Start-End date:** 19/10/2017 - 31/08/2020 **Duration:** 2 years - 10 months - 13 days  
**Type of contract:** Temporary employment contract  
**Dedication regime:** Full time  
**Primary (UNESCO code):** 120317 - Informatics  
**Field of management activity:** University



## Education

### University education

#### 1st and 2nd cycle studies and pre-Bologna degrees

**1 University degree:** Higher degree

**Name of qualification:** Máster Universitario en Ingenierías y Arquitectura

**Degree awarding entity:** Universidad de Extremadura

**Type of entity:** University

**Date of qualification:** 20/06/2018

**2 University degree:** Graduado

**Name of qualification:** Grado en Ingeniería Informática en tecnologías de la información

**City degree awarding entity:** Mérida, Extremadura, Spain

**Degree awarding entity:** Universidad de Extremadura

**Type of entity:** University

**Date of qualification:** 22/06/2017

**Average mark:** Good

### Specialised, lifelong, technical, professional and refresher training (other than formal academic and healthcare studies)

**1 Training title:** LearnEnglish Select Santander- Select Intermediate Level (B1)

**Awarding entity:** EMBAJADA DEL REINO UNIDO (BRITISH COUNCIL)

**End date:** 13/02/2021

**Duration in hours:** 25 hours

**2 Training title:** From Reality to Virtuality: The science and the art of creating VR experiences

**Awarding entity:** University of Oulu

**End date:** 15/06/2019

**Type of entity:** University

**Duration in hours:** 40 hours

**3 Type of training:** Course

**Training title:** Introducción al desarrollo de videojuegos con Unity

**City awarding entity:** Merida, Extremadura, Spain

**Awarding entity:** Universidad de Extremadura

**End date:** 03/05/2019

**Type of entity:** University

**Duration in hours:** 40 hours

**4 Training title:** eHealth: Tecnologías para la salud 2018

**Awarding entity:** Instituto internacional de investigación e innovación del envejecimiento

**End date:** 12/09/2018

**Type of entity:** Healthcare Institutions

**Duration in hours:** 15 hours

**5 Type of training:** Course

**Training title:** Curso de Big Data y Supercomputación: "Transformando datos en conocimiento"

**City awarding entity:** Cáceres, Extremadura, Spain

**Awarding entity:** Computaex



End date: 19/12/2016

Duration in hours: 23 hours

**Language skills**

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
English	B1	B1	B1	B1	B1

**Teaching experience****General teaching experience**

- Name of the course:** Fundamentos de Programación  
**University degree:** Graduado o Graduada en Ingeniería Informática en Tecnologías de la Información  
**Start date:** 15/09/2020 **End date:** 20/12/2020  
**Entity:** Centro Universitario de Mérida **Type of entity:** University Centres and Structures and Associated Bodies  
**Faculty, institute or centre:** Centro Universitario de Mérida
- Name of the course:** Sistemas de Comunicación Multimedia  
**University degree:** Graduado o Graduada en Ingeniería de Diseño Industrial y Desarrollo de Productos  
**Start date:** 01/02/2020 **End date:** 14/05/2020  
**Entity:** Centro Universitario de Mérida **Type of entity:** University Centres and Structures and Associated Bodies  
**Faculty, institute or centre:** Centro Universitario de Mérida

**Scientific and technological experience****Research and development groups/teams**

**Name of the group:** Grupo Orión  
**Aims of the group:** Virtual reality, Extended reality, Color appearance  
**Type of collaboration:** Co-authorship of projects and their development  
**Affiliation entity:** Universidad de Extremadura **Type of entity:** University  
**Start date:** 19/10/2017



## Scientific or technological activities

### R&D projects funded through competitive calls of public or private entities

**Name of the project:** Aplicación de técnicas hiperespectrales y de realidad virtual a la medida del rendimiento de color de fuentes luminosas LED

**Entity where project took place:** Universidad de Extremadura **Type of entity:** University

**Name principal investigator (PI, Co-PI....):** Pedro José Pardo

**Nº of researchers:** 6

**Funding entity or bodies:**

Junta de Extremadura

**Type of entity:** IB16004

**Start-End date:** 03/06/2017 - 15/10/2020

**Total amount:** 115.261,3 €

## Scientific and technological activities

### Scientific production

#### Publications, scientific and technical documents

- 1 Francisco Díaz Barrancas; Halina Carmen Cwierz; Pedro José Pardo; Ángel Luis Pérez; María Isabel Suero. Colour appearance in immersive three-dimensional virtual environments. Coloration Technology. 137, pp. 38 - 43. Wiley, 14/12/2020.

**Type of production:** Popular science article

**Format:** Journal

**Corresponding author:** Yes

- 2 Francisco Díaz Barrancas; Halina Carmen Cwierz; Pedro José Pardo; Ángel Luis Pérez; María Isabel Suero. Spectral Color Management in Virtual Reality Scenes. Sensors. 20 - 19, pp. 5658. MDPI, 03/10/2020.

**Type of production:** Popular science article

**Format:** Journal

**Corresponding author:** Yes

#### Works submitted to national or international conferences

- 1 **Title of the work:** Application of spectral computing technics for color vision testing using virtual reality devices

**Name of the conference:** Electronic Imaging

**Corresponding author:** Yes

**City of event:** Burlingame, United States of America

**Date of event:** 26/01/2020

**End date:** 30/01/2020

**Organising entity:** Society for Imaging Science and Technology

Halina Carmen Cwierz; Francisco Díaz Barrancas; Pedro José Pardo; Ángel Luis Pérez; María Isabel Suero.



- 2** **Title of the work:** Visual fidelity improvement in virtual reality through spectral textures applied to lighting simulations  
**Name of the conference:** Electronic Imaging  
**Corresponding author:** No  
**City of event:** Burlingame, United States of America  
**Date of event:** 26/01/2020  
**End date:** 30/01/2020  
**Organising entity:** Society for Imaging Science and Technology  
Francisco Díaz Barrancas; Halina Carmen Cwierz; Pedro José Pardo; Ángel Luis Pérez; María Isabel Suero.
- 3** **Title of the work:** A virtual scene with conservation objects with different illuminants and colour management  
**Name of the conference:** A conservation Carol: approcci interdisciplinari nell'ambito della conservazione dei beni culturali  
**Corresponding author:** No  
**City of event:** Milano, Lombardia, Italy  
**Date of event:** 20/12/2019  
**Organising entity:** Università degli studi di Milano  
Francisco Díaz Barrancas; Halina Carmen Cwierz; Pedro José Pardo; Ángel Luis Pérez; María Isabel Suero.
- 4** **Title of the work:** Aplicación de texturas hiperespectrales a objetos 3D en escenas de Realidad Virtual  
**Name of the conference:** XII Congreso Nacional del Color  
**Corresponding author:** Yes  
**City of event:** Linares, Andalusia, Spain  
**Date of event:** 25/09/2019  
**End date:** 27/09/2019  
**Organising entity:** SOCIEDAD ESPAÑOLA DE OPTICA SEDO  
Francisco Díaz Barrancas; Halina Carmen Cwierz; Pedro José Pardo; Ángel Luis Pérez; María Isabel Suero.
- 5** **Title of the work:** Cómo realizar una correcta gestión del color en sistemas de realidad virtual  
**Name of the conference:** XII Congreso Nacional del Color  
**City of event:** Linares, Andalusia, Spain  
**Date of event:** 25/09/2019  
**End date:** 27/09/2019  
**Organising entity:** SOCIEDAD ESPAÑOLA DE OPTICA SEDO  
Halina Carmen Cwierz; Francisco Díaz Barrancas; Pedro José Pardo; Ángel Luis Pérez; María Isabel Suero.
- 6** **Title of the work:** Herramienta para la valoración de la capacidad de discriminación del color de observadores normales y defectivos mediante un test de ordenación de color, reproducido en un entorno de realidad virtual  
**Name of the conference:** XII Congreso Nacional del Color  
**City of event:** Linares, Andalusia, Spain  
**Date of event:** 25/09/2019  
**End date:** 27/09/2019  
**Organising entity:** SOCIEDAD ESPAÑOLA DE OPTICA SEDO  
Halina Carmen Cwierz; Francisco Díaz Barrancas; Pedro José Pardo; Ángel Luis Pérez; María Isabel Suero.



- 7** **Title of the work:** Reconstrucción de objetos 3D mediante técnicas SFM y obtención de texturas hiperespectrales  
**Name of the conference:** XII Congreso Nacional del Color  
**Corresponding author:** Yes  
**City of event:** Linares, Andalusia, Spain  
**Date of event:** 25/09/2019  
**End date:** 27/09/2019  
**Organising entity:** SOCIEDAD ESPAÑOLA DE OPTICA SEDO  
Francisco Díaz Barrancas; Halina Carmen Cwierz; Pedro José Pardo; Ángel Luis Pérez; María Isabel Suero.
- 8** **Title of the work:** Hyperspectral textures for a better colour reproduction in virtual reality  
**Name of the conference:** 15th Conferenza del Colore  
**Corresponding author:** No  
**City of event:** Macerata, Marche, Italy  
**Date of event:** 05/09/2019  
**End date:** 07/09/2019  
**Organising entity:** Gruppo del Colore – Associazione Italiana Colore  
Francisco Díaz Barrancas; Halina Carmen Cwierz; Pedro José Pardo; Ángel Luis Pérez; María Isabel Suero.
- 9** **Title of the work:** Improvement of realism sensation in virtual reality scenes applying spectral and colour management techniques  
**Name of the conference:** The 25th Symposium of the International Colour Vision Society  
**Corresponding author:** No  
**City of event:** Riga, Latvija, Latvia  
**Date of event:** 05/07/2019  
**End date:** 08/07/2019  
**Organising entity:** International Colour Vision Society  
Francisco Díaz Barrancas; Halina Cwierz; Pedro José Pardo; Ángel Luis Pérez; María Isabel Suero.
- 10** **Title of the work:** Validity of virtual-reality-based systems applied to lighting and colour rendering research  
**Name of the conference:** The 25th Symposium of the International Colour Vision Society  
**Corresponding author:** No  
**City of event:** Riga, Latvija, Latvia  
**Date of event:** 05/07/2019  
**End date:** 08/07/2019  
**Organising entity:** International Colour Vision Society  
Pedro José Pardo; Halina Cwierz; Francisco Díaz Barrancas; Ángel Luis Pérez; María Isabel Suero.
- 11** **Title of the work:** IMPROVING PROGRAMMING LEARNING WITH AUGMENTED REALITY AND GAMIFICATION  
**Name of the conference:** EDULEARN 2019  
**Corresponding author:** No  
**City of event:** Palma de Mallorca, Balearic Islands, Spain  
**Date of event:** 01/07/2019  
**End date:** 03/07/2019  
**Organising entity:** IATED  
Halina Cwierz; Francisco Díaz Barrancas; Pedro José Pardo; Juan Ignacio Guisado; Cristina Ruiz Palma.



- 12** **Title of the work:** Un análisis preliminar de nuevos modelos de mutación dirigida en algoritmos genéticos.  
**Name of the conference:** XVIII Conferencia de la Asociación Española para la Inteligencia Artificial  
**Corresponding author:** No  
**City of event:** Granada, Andalusia, Spain  
**Date of event:** 23/10/2018  
**End date:** 26/10/2018  
**Organising entity:** Asociación Española para la Inteligencia Artificial  
Borja Rodríguez Puerta; Francisco Díaz Barrancas; Francisco Chávez De la O; Francisco Fernández de Vega.
- 13** **Title of the work:** Colour Management in Virtual Reality applied to Lighting Simulations  
**Name of the conference:** International Colour Association (AIC) Conference 2018  
**Corresponding author:** No  
**City of event:** Lisboa, Lisboa, Portugal  
**Date of event:** 25/09/2018  
**End date:** 29/09/2018  
**Organising entity:** International Colour Association  
Halina Cwierz; Francisco Díaz Barrancas; Pedro José Pardo; Ángel Luis Pérez; María Isabel Suero.
- 14** **Title of the work:** Is it possible to apply colour management technics in Virtual Reality devices?  
**Name of the conference:** 14th Conferenza del Colore  
**Corresponding author:** No  
**City of event:** Firenze, Toscana, Italy  
**Date of event:** 11/09/2018  
**End date:** 12/09/2018  
**Organising entity:** Grupo del Color- Asociación Italiana del Color  
**Type of entity:** Associations and Groups  
Francisco Díaz Barrancas; Pedro José Pardo; María Isabel Suero; Ángel Luis Pérez.

### Other dissemination activities

- 1** **Title of the work:** European Researcher 'Night  
**Name of the event:** Noche de los investigadores 2020  
**Type of event:** Fairs and exhibitions  
**City of event:** Mérida, Extremadura, Spain  
**Date of event:** 27/09/2020  
**Organising entity:** Universidad de Extremadura  
**Type of entity:** University
- 2** **Title of the work:** III Semana de la ciencia y la Tecnología en Extremadura  
**Name of the event:** Reto de Ada Byron  
**Type of event:** Fairs and exhibitions  
**City of event:** Mérida, Extremadura, Spain  
**Date of event:** 15/11/2019  
**Organising entity:** Servicio de difusión de la cultura científica
- 3** **Title of the work:** European Researchers ' Night  
**Name of the event:** Noche de los investigadores 2018  
**Type of event:** Fairs and exhibitions  
**City of event:** Mérida, Extremadura, Spain  
**Date of event:** 12/09/2018



**Organising entity:** Universidad de Extremadura

**Type of entity:** University

**4 Title of the work:** European Researchers' Night

**Name of the event:** Noche de los investigadores 2015

**Type of event:** Fairs and exhibitions

**City of event:** Mérida, Extremadura, Spain

**Date of event:** 11/11/2015

**Organising entity:** Universidad de Extremadura

**Type of entity:** University

## R&D management and participation in scientific committees

### Evaluation and revision of R&D projects and articles

**Name of the activity:** Review

**Performed tasks:** Review article

**Entity where activity was carried out:** Journal of the Optical Society of America A

**Type of entity:** Associations and Groups

**Start date:** 27/01/2021

## Other achievements

### Stays in public or private R&D centres

**1 Entity:** Università Degli Studi di Milano

**Faculty, institute or centre:** Dipartimento di Informatica

**City of entity:** Milano, Lombardia, Italy

**Start-End date:** 01/10/2019 - 20/12/2019

**Duration:** 3 months

**Goals of the stay:** Doctorate

**Provable tasks:** Research stay

**2 Entity:** University of Granada

**Type of entity:** University

**Faculty, institute or centre:** Ciencias de la Educación

**City of entity:** Granada, Andalusia, Spain

**Start-End date:** 01/07/2017 - 31/07/2017

**Duration:** 1 month

**Goals of the stay:** Guest

**Provable tasks:** Research stay