CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	Francisco		
Family name	Fernández de Vega		
Gender (*)	Male	Birth date (dd/mm/yyyy)	23/08/71
Social Security, Passport, ID number	34774388k		
e-mail	fcofdez@unex.es	https://grupogea.unex.es/index.php/componentes/francisco-fernandez-de-vega/	
Open Researcher and Contributor ID (ORCID) (*)	**0000000210861443**		

(*) Mandatory

A.1. Current position

Position	Full Professor		
Initial date	September 2019		
Institution	University of Extremadura		
Department/Center	Comuters and Comm. Technologies		
Country	Spain	Teleph. number	
Key words	Computational Intelligence, Parallel and Distrib. Comp. Computational Creativity.		

A.2. Previous positions (research activity interuptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
1993-1994	Escuela Politécnica de Mérida – Ayuntamiento de Mérida
1994-1997 1997-2019	Ayuntamiento de Almendralejo Universidad de Extremadura

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Licenciado en Informática	Universidad de Sevilla, Spain	1993
Doctorado Europeo Informática	Universidad de Extremadura, Spain	2001

(Include all the necessary rows)

Part B. CV SUMMARY *(max. 5000 characters, including spaces)*

FFV is a PhD Extraordinary Award, University of Extremadura 2001, Director of the Artificial Evolution Group of the University of Extremadura (UEX) since 2005 and chair of the Task Force on Creative Intelligence of the IEEE Computational Intelligence Society since 2011. He is a Full Professor in the area of Computer Architecture and Technology. He has been CIO of the Uex, Deputy Director of the University Center of Merida and Director of the Ceta-Ciemat Chair of the Uex. FFV has been granted four six-year term research evaluations, and granted with accessit best professor award University of Extremadura 2021.

He has published 40 JCR articles, with more than 2500 citations collected in Google Scholar, and h-25 index. He is among the 35 scientists with more publications in Genetic Programming.

FFV has organized international workshops and special sessions in relevant conferences, such as ACM GECCO, IEEE ICPP, IEEE CEC, IEEE WCCI, IEEE PACT, in particular the Workshops: Parallel and Distributed Evolutionary Algorithms, Parallel architectures and evolutionary algorithms, and Evolutionary Music, each with several editions, held since 2005. He has been local chair of EvoApps 2020, and co-editor of this conference for 8 years. He has also organized several national conferences, including the MAEB conference in its first and tenth edition (AEB 2002 and 2015), and Spanish Conference of Biomedical Engineering Society in 2003.

He and his PhD students have received awards for the best papers from several relevant conferences: PPSN 2002, Evohot 2008, ACM Gecco PhD student workshop 2007. He has received the ACM Gecco Evolutionary Art, design and creativity competition award 2013, Linextremix International Award 2006, as well as nominations for best article in multiple congresses: IEEE CEC 2013, EvoMusart 2013, and Evo 2024 Nomination outstanding student paper. His artworks have been internationally selected at Show Your World Competition 2017, New York. His project Sharpmony received the best Artificial Intelligence APP award, by the Spanish Association of Artificial Intelligence in 2021.*

FFV was Keynote Speaker at IDC 2015 conference in Guimaraes, Portugal. He has given conferences and international tutorials: University of California in San Diego, New Orleans IEEE Section, IEEE CEC Portland, Edinburgh and Beijing, University of Luxembourg, CERN, Universidad Mexiquense del Bicentenario, Universidad Autonoma Metropolitana de México, Centro de Investigación y Educación Superior de Ensenada, Mexico, etc.; Research collaborations have been established that have resulted in the publication of relevant papers, among which we highlight: University of California at Berkeley and Michigan State University in the USA; University of Lausanne, and CERN in Switzerland; CICESE and Universidad Autónoma Metropolitana in Mexico; National Tsing Hua University, Taiwan.

Also in Spain, collaboration relations are maintained with the Complutense University of Madrid, Polytechnic University of Valencia, University of the Basque Country, University of Malaga, and, particularly, with the University of Granada, with which we have been collaborating through national research projects for the last 15 years.

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications *(see instructions)*

Selected JCR papers published in the last 10 years:

Francisco Fernández de Vega, Teaching Programming in the 21st Century. Journal of Computer Information Systems 63 (4) 841-852, 2023.

J Alvarado Diaz, J Manuel Velasco, M Botella, M. Maqueda, F. Fernández de Vega, J.I. Hidalgo, BLOOD GLUCOSE PREDICTION USING A TWO PHASE TSK FUZZY RULE BASED SYSTEM – pp. 231, DIABETES TECHNOLOGY & THERAPEUTICS, 2022.

Villegas-Cortez, J., Benavides-Alvarez, C., Avilés-Cruz, C., Román-Alonso, G., Fernández de Vega, F., Chávez de la O, F., and Cordero-Sánchez, S.. Interest points reduction using evolutionary algorithms and CBIR for face recognition. Visual Computer 37 (7) 1883-1897 (2021). https://doi.org/10.1007/s00371-020-01949-8

Francisco Fernández de Vega, Gustavo Olague, Daniel Lanza, Francisco Chávez de la O, Wolfgang Banzhaf, Erik D. Goodman, Jose Menendez-Clavijo, Axel Martinez:
Time and Individual Duration in Genetic Programming. IEEE Access 8: 38692-38713 (2020)

Perla Juárez-Smith, Leonardo Trujillo, Mario García-Valdez, Francisco Fernández de Vega, Francisco Chávez, **Local search in speciation-based bloat control for genetic**

programming, *Genetic Programming and Evolvable Machines,* 20:1-34, 2019, DOI:10.1007/s10710-019-09351-7 (2019).

D. Camacho, C. Cotta, J.J. Merelo-Guervós, F. Fernández de Vega, **Bioinspired Algorithms in Complex Ephemeral Environments**, *Future Generation Computer Systems* 88:732-734, 2018, DOI:10.1016/j.future.2018.07.056. (2018).

Chávez, F., Fernández, F., Lanza, D., Benavides, C., Villegas, J., Trujillo, L., ... & Román, G. (2016). Deploying massive runs of evolutionary algorithms with ECJ and Hadoop: Reducing interest points required for face recognition.*The International Journal of High Performance Computing Applications*. 2018. 32 (5) 706-720 https://doi.org/10.1177/10943420166783

García-Valdez, M., Trujillo, L., Merelo, J. J., De Vega, F. F., & Olague, G. (2015). The evospace model for pool-based evolutionary algorithms. *Journal of Grid Computing*, *13*(3), 329-349.

Clemente, E., Chavez, F., de Vega, F. F., & Olague, G. (2015). Self-adjusting focus of attention in combination with a genetic fuzzy system for improving a laser environment control device system. *Applied Soft Computing*, *32*, 250-265.

Juan Luís Jiménez Laredo, Pascal Bouvry, D. L. González, Francisco Fernández de Vega, Maribel García Arenas,Juan J. Merelo Guervós, Carlos M. Fernandes: **Designing robust volunteer-based evolutionary algorithms.**Genetic Programming and Evolvable Machines 15(3): 221-244 (2014)

Francisco Fernández de Vega, Cayetano Cruz, Lilian Navarro, Patricia Hernandez, Tania Gallego, Luis Espada:**Unplugging Evolutionary Algorithms: an experiment on human-algorithmic creativity.** Genetic Programming and Evolvable Machines 15(4): 379-402 (2014).

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

Selected awarded papers at best national/international conferences.

F. Fernández de Vega, J. Alvareado, M. Morita, Sharpmony: A Computational Intelligence Based Tool for 4-part harmony. Best AI APP **award** prize, CAEPIA conference 2021. Málaga, Spain. ORAL.

F. Fernández de Vega, L. Navarro, C. Cruz, P. Hernández, L. Espada, T. Gallego: “XY”. ACM GECCO 2013 **Winner** Evolutionary Art, Design and Creativity Competition. ORAL

E. Paccioni, F. Fernández de Vega
On the impact of directed mutation applied to Evolutionary 4-part harmony models. **Nominated** for Outstanding Student for Evo* 2024. Aberystwyth, Wales, UK, 3-5 April 2024.

F. Fernández de Vega, L. Navarro, C. Cruz, F. Chávez, L. Espada, P. Hernández, T. Gallego.: Unplugging Evolutionary Alborithms. On the sources of novelty and creativity. Best paper **nomination** IEEE CEC 2013, Cancún, México.

G. Reis, F. Fernández, A. Ferreira, Automatic Transcription of Polyphonic Piano Music using Genetic Algorithms, Adaptive Spectral Envelope Modeling and Dynamic Noise Level Estimation. **Finalist** ACM GECCO HUMMIES 2013, Amsterdam, Netherlands.

M. García, L. Trujillo, F. Fernández de Vega, J.J. Merelo, G. Olague, EvoSpace-Interactive: A Framework to Develop Distributed Collaborative-Interactive Evolutionary Algorithms for Artistic Design. Best paper nomination EVOMUSART 2013. Viena, Austria.

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

Selected projects developed in the last 10 years:

Title: UEX:DEMOCRATAI. TIN2017-85727-C4-4-P
Funding agency: Ministry of Science, Innovation and Universities. National Reserch Programe, Spanish Gobernment.
Participating entities: Uex, Ugr.
From: 2020 to: 2023
Principal Investigator: IP Subproyecto UEX: Francisco Fernández de Vega.
Financiación Subproyecto Uex: 51909€

Title: UEX:DEEPBIO. TIN2017-85727-C4-4-P
Funding agency: Ministry of Science, Innovation and Universities. National Reserch Programe, Spanish Gobernment.
Participating entities: Uex, Ugr, UMA.
From: 2017 to: 2020
Principal Investigator: IP Subproyecto UEX: Francisco Fernández de Vega
Financiación Subproyecto Uex: 51.062€

Title: Escuela Municipal de Jóvenes Científicos
Funding agency: Fecyt.
Participating entities: Fundación Universidad Sociedad Universidad de Extremadura, Universidad de Extremadura.
From: 2016 to: 2017
Principal Investigator: Francisco Fernández de Vega.
Fundings: 50.000€

Title: UEX:EPHEMECH: ALGORITMOS BIOINSPIRADOS EN ENTORNOS EFIMEROS COMPLEJOS. TIN2014-56494-C4-2-P
Funding agency: Ministry of Science and Innovation. National Research Programe. Spanish Gobernment.
Participating entities: Uex, Ugr, UMA.
From: 2014 to: 2017
Principal Investigator: IP Subproyecto UEX: Francisco Fernández de Vega.
Fundings: 45.000€

Title: Propiedades FP7-PEOPLE2013-IRSES
Funding agency: European union, VII Frame Programe.
Participating entities: Inria, UB2, France, INESC - ID, France, Instituto de Engenharia de Sistemas e computadores, Portugal, UEX, España, ITT, Mexico, CICESE, México.
From: 2014 to: 2017
Principal Investigator: IP Subproyecto UEX: Francisco Fernández de Vega.
Fundings: 130.200€

C.4. Contracts, technological or transfer merits, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information, if any

P201400096: Sistema de Control remoto de dispositivos con láser. F. Fernández de Vega, F. Chávez, E. Clemente, G. Olague, L. Donzal. Universidad de Extremadura – CICESE, México.

P202230016 Método y Sistema para predicción de valores de glucosa y generación de alertas de hipoglucemia e hiperglucemia. J. I. Hidalgo, J. Hidalgo, J. Lanchares, J. Alvarado, J.M . Velasco, O. Garnica, F. Fernández de Vega, F. Chávez. Universidad Complutense de Madrid - Universidad de Extremadura.