Hilde Pérez García

Engineer and Professor

About me:

I love my job. I enjoy the feeling when you have been able to convey knowledge with passion to the students. I love learning and discovering new things.

Thanks to my job, I have travelled to more than 30 countries. In every place, I have met interesting and charming people.

Department of Mechanical, Computer and Aerospace Engineering

University of Leon – SPAIN

+34 630869223

hilde.perez@unileon.es

Scopus Author ID: 36906589900

ORCID: 0000-0001-7112-1983

Spanish-53y

Summary of CV:

Hilde Perez is Associate Professor and head of the Department of Mechanical, Computer and Aerospace Engineering at the University of Leon. She is also member of the board of governors at the University. She received her engineering degree in Mechanical Engineering from the University of Oviedo and in Electrical and Electronic Engineering from the University of León. She received her Ph. D. from Polytechnic University of Madrid, obtaining the Outstanding Doctorate Award.

She has taught different subjects including Manufacturing Processes, Materials Science, Welding, Mechanical Technology, Machine Design, Process Planning and Computer aided design and Manufacturing. These subjects are included in the study plans of bachelor in mechanical engineering and master of industrial engineering.

She has been involved in different national research projects in collaboration with the Polytechnic University of Madrid. She is leading a research group in the University of Leon, Smart Systems for Manufacturing. The group is now involved in a project supported by the Spanish National Plan of R&D in the field of Collaborative Robots for Manufacturing Industry with application of Computer Vision and Data Mining. Her research fields of interest are modelling and simulation of machining processes, micromanufacturing and high performance machining.

She has made two stays, during 2015 and 2016, as a research guest in the Fraunhofer IPK Institut (Berlin), in the Production Microtechnologies department.

In 2016, she received a "Salvador Madariaga" competitive Grant of the Spanish Ministry of Education, for professors and senior researchers in foreign centers.

In 2017, 2018 and 2019, she taught at the School of Mechanical Engineering of the University of Xiangtan (China), under the agreement of the cooperation program between both universities.

Scientific and Technological activities

Scientific Production (most relevant in the last 4 years)

- Analysis of a single-edge micro cutting process in a hybrid parallel-serial machine tool. Marcelo Fajardo-Pruna, Luis Lopez-Estrada, Hilde Perez, Eduardo Diez, Antonio Vizan. (2019). International Journal of Mechanical Sciences, 151, pp. 222–235. DOI: 10.1016/j.ijmecsci.2018.11.023. Quartile: Q1

- Accuracy of a new online method for measuring machining parameters in milling. Leal-Muñoz, E., Diez, E., Perez, H., Vizan, A. (2018). Measurement: Journal of the International Measurement Confederation, 128, pp. 170-179. DOI: 10.1016/j.measurement.2018.06.018. Quartile: Q1

- Identification of the Actual Process Parameters for Finishing Operations in Peripheral Milling. Leal-Muñoz, E., Diez, E., Perez, H., Vizan, A. (2018). Journal of Manufacturing Science and Engineering, Transactions of the ASME, 140(8),084502. DOI: 10.1115/1.4039917. Quartile: Q1

- Dynamic analysis of a piezoelectric system to compensate for workpiece deformations in flexible milling. Diez, E., Leal-Muñoz, E., Perez, H., Vizan, A. (2017). Mechanical Systems and Signal Processing, 91, pp. 278-294. DOI: 10.1016/j.ymssp.2017.01.014. Quartile: Q1

- Feasibility study of in-process compensation of deformations in flexible milling. Diez, E., Perez, H., Marquez, J., Vizan, A. (2015). International Journal of Machine Tools and Manufacture, 94, pp. 1-14. DOI: 10.1016/j.ijmachtools.2015.03.008. Quartile: Q1

- Design and implementation of a stereo vision system on an innovative 6DOF single-edge machining device for tool tip localization and path correction. López-Estrada, L., Fajardo-Pruna, M., Sánchez-González, L., Pérez, H., Fernández-Robles, L., Vizán, A. (2018). Sensors (Switzerland), 18(9),3132. DOI: 10.3390/s18093132. Quartile: Q2

- Ground-level ozone predictions using outlier identification leveraged sample weighted regressors. Alaiz Moreton, H., Fernández-Robles, L., Alfonso-Cendón, J., Castejón-Limas, M., Sánchez-González, L., Pérez-Garcia, H. (2018). Journal of Experimental and Theoretical Artificial Intelligence, In press. DOI: 10.1080/0952813X.2018.1509898. Quartile: Q3

- Generic mathematical model for efficient milling process simulation. Perez, H., Diez, E., Marquez, J.D.J., Vizan, A. (2015). Mathematical Problems in Engineering, 2015,875045. DOI: 10.1155/2015/875045. Quartile: Q3

Scientific and Technological activities

Participation in R&D and Innovation projects (most relevant in the last 4 years)

- Title of the project: Development of a learning system based on data mining and computer vision for collaborative environments. National R&D Program of the Spanish Ministry of Economy, Industry and Competitiveness. From 30/12/2016 to 29/12/2019. DPI2016-79960-C3-2-P.

- Title of the project: Development, optimization and control of a micro machining process. National R&D Program of the Spanish Ministry of Economy, Industry and Competitiveness. From 30/12/2010 to 31/06/2014. DPI2009-14535.

- Title of the project: South Mediterranian Welding Center for Education, Training and Quality Control. Erasmus + Programme. Capacity building in the field of higher education. From 15/10/2015 to 14/04/2019. 561786-EPP-1-2015-1-SE-EPPKA2-CBHE-JP.

- Title of the project: Capacity Building for Renewable Energy Planning in Cuban Higher Education Institutions. Erasmus + Programme. Capacity building in the field of higher education. From 15/10/2017 to 14/10/2020. 585894-EPP-1-2017-1-FI-EPPKA2-CBHE-JP(2017-3693)

Patents

- Device for measuring the tip of a tool or machine element and the application method. Antonio Vizan Idoipe; Juan Carlos Hernández Matías; Hilde Perez Garcia; Eduardo Diez Cifuentes. P201331600. 04/05/2015. Universidad Politécnica de Madrid. Betia Soluciones Técnicas S.L.

Language Skills

Language	Listening skills	Reading skills	Spoken Interaction	Speaking skills	Writing
English	C1	C1	C1	C1	C1
German	B2	B2	B2	B2	B2
Italian	B1	B1	B1	B1	B1