

## Heydi Méndez Vázquez

### PROPOSED CITATION

*For her contribution in the integration of biometric research to the development of operational systems for face recognition in border control and other biometric applications.*

### MAIN ACHIEVEMENTS

She has an intensive application of theoretical results from her research to real biometric identification systems solving practical problems that have impacted on the welfare and safety of people in Cuba and other Latin American countries.

She has published more than 40 articles<sup>i</sup> about the development of new methods for automatic face recognition and has presented more than 15 oral and poster presentations on conferences and scientific meetings. She has reviewed papers for prestigious conferences and journals such as the International Conference on Computer Vision and Pattern Recognition (CVPR) and the IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI). She is a young associated of the Cuban Academy of Sciences, and a member of the International Association of Pattern Recognition (IAPR). She received a best student paper award in the 5th International Summer School on Biometrics endorsed by the IAPR, in Alghero, Italy, 2008 and was awarded with one of the annual prizes given by the Cuban Academy of Sciences in 2011. She was also awarded with one of the TWAS 2012 Prize for Young Scientists from Cuba. In 2015 she received the Aurora Pons Porrata Award given to women researchers by the Iberoamerican Congress on Pattern Recognition. At present, she is the head of the Biometric Research Group in CENATAV and the Vice-president of the Cuban Association of Pattern Recognition (ACRP).

### MOST IMPORTANT CONTRIBUTIONS

- I. Researcher in charge of the development of the search and matching module of the Cuban automatic fingerprints identification system (CUBAFIS/BIOMESYS). She proposed and evaluated a structural representation of fingerprints. This system has been used by Cuban safety governmental agencies since 2006.
- II. Leader of the Cuban face identification system for border control, in which were included the results obtained on her PhD thesis about "Face Recognition based on Local Appearance for real applications in varying lighting conditions" and other obtained theoretical results, endorsed by a total of 18 publications in national and international events of high prestige. This system has been introduced in Cuba and other Latin-American countries since 2010<sup>ii</sup>.
- III. Leader of the modality of face recognition in the project "***multi-biometric identification platform, Biomesys***"  
Head of the research group which has being in charge of introducing the developed face recognition algorithms to the Cuban multi-biometric system. This includes the work with BioApi and CBEFF standards in order to guarantee the system interoperability. The system was awarded with one of the Quality Prizes of the International Fair, Informatics 2013, held in Havana in March<sup>iii</sup>.

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<sup>i</sup> [https://dblp.org/pers/hd/v/Vazquez:Heydi\\_Mendez](https://dblp.org/pers/hd/v/Vazquez:Heydi_Mendez)

<sup>ii</sup> <http://www.juventudrebelde.cu/ciencia-tecnica/2012-06-19/aplican-reconocimiento-automatico-de-rostros> (in spanish)

<sup>iii</sup> <http://www.radiorebelde.cu/noticia/concluye-habana-informatica-2013-20130322/> (in spanish)