Dr. Ram Prasad K, Ph.D

Founder & Director
VisionCog Research & Development Pvt. Ltd.
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SUMMARY

My expertise is in the areas of classical machine learning, deep learning, computer vision, biometrics, software developments and algorithm design. I obtained the prestigious European Union Marie Curie Fellowship twice, for my doctoral research work at Universidad Autonoma de Madrid, Spain, and also for postdoctoral research work at Dublin City University, Ireland, respectively. My PhD work got nominated for the prestigious European Biometrics Research and Industry Award. I have collaborated with both research industries and academic labs in Europe and India through technology transfer, and as a researcher. Currently, I am the director of VisionCog R&D, and manage commercial research and development works in the domain of computer vision and biometrics.

EDUCATION / ACADEMIC WORKS

Dublin City University, Ireland
Postdoctoral Researcher (Marie Curie Fellow) — Sep 2015 - August 2017

Universidad Autónoma de Madrid, Spain — May 2011 - June 2015
Ph.D in Computer Science (Marie Curie Fellow)
*with distinctions "**Sobresaliente Cum Laude**"*
*and "**International Doctor**"*

Halmstad University, Sweden
Visiting Researcher — Sep 2013 - Dec 2013

University of Twente, The Netherlands
Visiting Researcher — Sep 2012 - Dec 2012

Chennai Mathematical Institute, India — Aug 2006 - June 2008
Master of Science in Computer Science

PROFESSIONAL WORKS

VisionCog R&D Pvt. Ltd, Thiruvananthapuram, India — September 2018 - present
Founder & Director

OptiPace Technologies, Bangalore, India — January 2018 - present
Senior Consultant

Higher Education Department, Govt of Kerala
Content Developer and Trainer for Artificial Intelligence — January 2019 - January 2020

Universidad Autónoma de Madrid, Spain
Marie Curie Research Fellow — May 2011 - Dec 2013
Technical Staff — Jan 2014 - July 2015

Geodesic Limited, Bangalore, India
Software Engineer — July 2008 - Mar 2011

PUBLICATIONS

Ph.D Thesis

1. R. P. Krish, Fingerprint Recognition for Forensic Applications, Universidad Autónoma de Madrid, 2015.

Book Chapters

2. Ramos, D., Krish, R. P., Fierrez, J., Didier, M., "From Biometric Scores to Forensic Likelihood Ratios", Chapter 14, Handbook of Biometrics for Forensic Science, Springer International Publishing AG, Tistarelly and Champod Eds, 2017.

Journals

3. "A Novel Feature Extraction Scheme for Classification of Iron Deposition in Brain MRI" (under submission).

4. "Ensemble Learning based Classification on Local Patches from Magnetic Resonance Images to detect Iron depositions in Brain", (Accepted) *International Journal of Bio-Inspired Computing*, 2020

5. Krish, R. P., Fierrez, J., Ramos, D., & Gomez-Herrero, F., "Improving Automated Latent Fingerprint Identification using Extended Minutiae Types", *Information Fusion, Elsevier,* 2018.

6. Krish, R. P., Fierrez, J., Ramos, D., Ortega-Garcia, J., & Bigun, J., "Pre-registration of latent fingerprints based on orientation field", *IET Biometrics, 4*(2), 2015.

7. Martinez-Diaz, M., Fierrez, J., Krish, R. P., & Galbally, J., "Mobile signature verification: feature robustness and performance comparison", *IET Biometrics, 3*(4), 2014.

Conferences

8. Krish, R. P., Whelan, P. F., "Visual Speech Encoding based on Facial Landmark Registration", Irish Machine Vision and Image Processing (IMVIP), Galway, 2016.

9. Krish, R. P., Fierrez, J., & Ramos, D., "Integrating rare minutiae in generic fingerprint matchers for forensics", *IEEE International Workshop on Information Forensics and Security (WIFS)*, *2015*.

10. Krish, R. P., Fierrez, J., Ramos, D., Ortega-Garcia, J., & Bigun, J., "Pre-registration for improved latent fingerprint identification", *IEEE 22nd International Conference on Pattern Recognition (ICPR)*, 2014.

11. Krish, R. P., Fierrez, J., Ramos, D., Ortega-Garcia, J., & Bigun, J., "Partial fingerprint registration for forensics using minutiae-generated orientation fields", *IEEE International Workshop on Biometrics and Forensics (IWBF),* 2014.

12. Krish, R. P., Fierrez, J., Ramos, D., Veldhuis, R., & Wang, R., "Evaluation of AFIS-Ranked latent fingerprint matched templates", *Image and Video Technology*, Springer Berlin Heidelberg, 2013.

13. Krish, R. P., Fierrez, J., Ramos, D., & Wang, R., "Towards Quantification of the Weight of Evidence with Partial Fingermarks on Real Forensic Casework", *Biometric Technologies in Forensic Science, BBfor2 Conference*, 14-15 October 2013, Nijmegen, The Netherlands, 2013

14. Krish, R. P., Fierrez, J., Galbally, J., & Martinez-Diaz, M., “Dynamic signature verification on smartphones”, In *Highlights on Practical Applications of Agents and Multi-Agent Systems*, Springer Berlin Heidelberg, 2013.

15. Krish, R. P., Fierrez, J., Ramos, D., & Wang, R., “On the importance of rare features in AFIS-ranked latent fingerprint matched templates”, IEEE *47th International Carnahan Conference on Security Technology (ICCST),* 2013.

16. Wang, R., Ramos, D., Fierrez, J., & Krish, R. P., “Towards regional fusion for high-resolution palmprint recognition”, IEEE *26th SIBGRAPI-Conference on Graphics, Patterns and Images (SIBGRAPI), 2013*