CURRICULUM VITAE

Maurício Pamplona Segundo

Professor, Department of Computer Science Federal University of Bahia E-mail: mauriciops@ufba.br www.dcc.ufba.br/~mauricio **Present Address**

Instituto de Matemática, sala 214 Av. Adhemar de Barros, S/N Salvador/BA, Brasil, 40170-110

EDUCATION

Doctor of Science, Computer Science

December 2013

Institution: Federal University of Paraná, Curitiba/PR, Brazil Thesis: Real-time 3D Face Recognition using Low-cost Devices

Fellowship: CAPES - Coordination for the Improvement of Higher Education Personnel CNPq - National Council of Technological and Scientific Development

Master of Science, Informatics

March 2010

Institution: Federal University of Paraná, Curitiba/PR, Brazil

Dissertation: Face Segmentation and Facial Features Detection in Range Images Fellowship: CAPES - Coordination for the Improvement of Higher Education Personnel

Bachelor of Science, Computer Science

March 2008

Institution: Federal University of Paraná, Curitiba/PR, Brazil

Monograph: Face Segmentation in Range Images

Fellowship: CNPq - National Counsel of Technological and Scientific Development

EXPERIENCE

Federal University of Bahia / Department of Computer Science

Professor March 2014 - present

• Teaching: Algorithms, Computer Vision

• Research & Development: Biometric recognition

• Academic Extension: Coach in Programming Contests

University of South Florida / Computer Science & Engineering

Postdoctoral scholar April 2017 - March 2018

• Research & Development: Ear recognition in-the-wild, satellite image understanding.

Visiting research scholar

August 2012 - August 2013

• Research & Development: Continuous 3D face authentication, 3D surface strain estimation.

United Nations Educational, Scientific and Cultural Organization / Congonhas Museum

Research fellow

July 2012 - December 2012

• Research & Development: Digitization and 3D reconstruction of cultural heritage objects.

Federal University of Paraná / Department of Informatics

Research assistant

June 2005 - December 2013

• Research & Development: face and fingerprint recognition, 3D reconstruction, accessibility tools.

PUBLICATIONS

- **Journal:** E. Hansley, M. Pamplona Segundo and S. Sarkar, "Employing fusion of learned and handcrafted features for unconstrained ear recognition", *IET Biometrics*, 2018.
- **Conference:** G. Dahia, M. Santos and M. Pamplona Segundo, "A study of cnn outside of training conditions", *IEEE International Conference on Image Processing (ICIP)*, 2017.
- **Worshop:** M. Pamplona Segundo and R. P. Lemes, "Pore-based ridge reconstruction for fingerprint recognition", *IEEE Conference om Computer Vision and Pattern Recognition Workshops (CVPRW)*, 2015.
- **Conference:** R. P. Lemes, M. Pamplona Segundo, O. R. P. Bellon and L. Silva, "Dynamic Pore Filtering for Keypoint Detection Applied to Newborn Authentication", *IEEE International Conference on Pattern Recognition (ICPR)*, 2014.
- **Journal:** M. Shreve, M. Pamplona Segundo, T. Luguev, D. Goldgof and S. Sarkar, "High-resolution 3D surface strain magnitude using 2D camera and low-resolution depth sensor", *Pattern Recognition Letters*, 2014.
- **Journal:** M. Pamplona Segundo, L. Silva, O. R. P. Bellon and S. Sarkar, "Orthogonal projection images for 3D face detection", *Pattern Recognition Letters*, 2013.
- **Workshop:** M. Pamplona Segundo, S. Sarkar, D. Goldgof, L. Silva and O. R. P. Bellon, "Continuous 3D Face Authentication using RGB-D cameras", *IEEE CVPRW*, 2013.
- **Conference:** M. Pamplona Segundo, L. Silva and O. R. P. Bellon, "Improving 3D face reconstruction from a single image using half-frontal face poses", *IEEE ICIP*, 2012.
- **Conference:** M. Pamplona Segundo, L. Gomes, O. R. P. Bellon and L. Silva, "Automating 3D Reconstruction Pipeline by SURF-based Alignment", *IEEE ICIP*, 2012.
- **Conference:** M. Pamplona Segundo, L. Silva and O. R. P. Bellon, "Real-Time Scale-Invariant Face Detection on Range Images", *IEEE International Conference on Systems, Man, and Cybernetics*, 2011.
- **Conference:** J. Choi, G. G. Medioni, Y. Lin, L. Silva, O. R. P. Bellon, M. Pamplona Segundo, T. Faltemier, "3D Face Reconstruction Using A Single or Multiple Views", *IEEE ICPR*, 2010.
- **Journal:** M. Pamplona Segundo, L. Silva, O. R. P. Bellon and C. C. Queirolo, "Automatic Face Segmentation and Facial Landmark Detection in Range Images", *IEEE Transactions on Systems, Man and Cybernetics. Part B. Cybernetics*, 2010.
- **Journal:** C. C. Queirolo, L. Silva, O. R. P. Bellon and M. Pamplona Segundo, "3D Face Recognition Using Simulated Annealing and the Surface Interpenetration Measure", *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 2009.
- **Book chapter:** C. C. Queirolo, S. A. Drovetto Junior, L. Silva, O. R. P. Bellon and M. Pamplona Segundo, "Hierarchical Evaluation Model: Extended Analysis for 3D Face Recognition", *Communications in Computer and Information Science*, Springer Verlag, 2009.
- **Conference:** C. C. Queirolo, L. Silva, O. R. P. Bellon and M. Pamplona Segundo, "3D face recognition using the Surface Interpenetration Measure: A comparative evaluation on the FRGC database", *IEEE ICPR*, 2008.
- **Conference:** M. Pamplona Segundo, C. C. Queirolo, O. R. P. Bellon and L. Silva, "Automatic 3D facial segmentation and landmark detection", *IAPR International Conference on Image Analysis and Processing (ICIAP)*, 2007.
- **Conference:** C. C. Queirolo, M. Pamplona Segundo, O. R. P. Bellon and L. Silva, "Noise versus Facial Expression on 3D Face Recognition", *IAPR ICIAP*, 2007.
- **Conference:** O. R. P. Bellon, L. Silva, C. C. Queirolo, S. A. Drovetto Junior and M. Pamplona Segundo, "3D face image registration for face matching guided by the surface interpenetration measure", *IEEE ICIP*, 2006.

HONORS

- Second place on Intel's Movidius Challenge
- Third place on IARPA's Functional Map of the World challenge
- World finalist in the 2017 ACM-ICPC (coach)
- Gold medal in the 2017 ACM-ICPC South America/Brazil Finals (coach)
- Top 10 in IEEEXtreme 10.0, 2016 (out of 2118 teams, coach)
- World finalist in the 2016 ACM-ICPC (coach)
- Silver medal in the 2016 ACM-ICPC South America/Brazil Finals (coach)
- Top 10 in IEEEXtreme 9.0, 2015 (out of 2040 teams, coach)
- Honorable mention in the Workshop of Undergraduate Works SIBGRAPI 2015
- Third best thesis in the Theses and Dissertations Contest CSBC 2014
- Second best paper in the Workshop of Undergraduate Works SIBGRAPI 2007 and 2008
- Best paper in the Workshop of Undergraduate Works SIBGRAPI 2007
- Third best paper in the Workshop of Undergraduate Works SIBGRAPI 2006

REVIEWER SERVICE

- IEEE Transactions on Pattern Analysis and Machine Intelligence
- IEEE Transactions on Image Processing
- IEEE Transactions on Information Forensics and Security
- IEEE Sensors Journal
- IEEE Signal Processing Letters
- IET Biometrics
- IET Computer Vision
- Information Sciences
- Pattern Recognition
- Pattern Recognition Letters
- International Journal of Pattern Recognition and Artificial Intelligence
- EURASIP Journal on Image and Video Processing
- · Computer & Graphics
- MDPI Sensors

STUDENTS

Current

- Leone da Silva de Jesus, D.Sc. student
- André Brasil Vieira Wyzykowski, D.Sc. student
- Lucas Amparo Barbosa, M.Sc. student
- Matheus Magalhães Batista dos Santos, M.Sc. student
- Adeilson Antonio da Silva, B.Sc. student
- Gabriel Dahia Fernandes, B.Sc. student
- Ubiratan Correia Barbosa Neto, B.Sc. student
- Undergraduate students (REU, Senior Project)
 - Jonathan Coutinho Luz de Queiroz (went for an internship at Microsoft/USA), 2017
 - Roberto Sales Caldeira (went for an internship at Google/Brazil), 2017
 - Antônio Roberto Paoli, 2016
 - Caio Araújo Neponoceno de Lima (went for graduate studies at UFMG/Brazil), 2016
 - Mateus Cordeiro Gonçalves de Carvalho, 2016
 - Daniel Rodrigues Carvalho (went for graduate studies at INRIA/France), 2015

GRANTS

- Multimodal face recognition, **Akiyama Inc.**, 2016-2018, R\$ 259,326.00 (Principal Investigator, co-PI: R. P. Lemes)
- Newborn identification, Akiyama Inc., 2016-2018, R\$ 216,996.00 (co-PI, PI: R. P. Lemes)
- Continuous authentication of individuals based on multiple facial properties, CNPq National Council
 of Technological and Scientific Development, 2014-2017, R\$ 21,000.00 (Principal Investigator)