Jhony Kaesemodel Pontes

Speech, Audio, Image and Video Technology Lab (SAIVT)
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Brisbane, Australia

Research Interests

3D Computer Vision, Machine Learning, Signal Processing, Optimization

Education

Ph.D. in Computer Vision 10/2015 – Present
"Representation and reconstruction of 3D objects from imagery"
Supervised by Clinton Fookes, Anders Eriksson, Sridha Sridharan
Queensland University of Technology (QUT), Brisbane, Australia

Visiting Research Scholar 01/2017 – 07/2017
Visiting scholar at the CI2CV Lab at the Robotics Institute
Supervised by Simon Lucey
Carnegie Mellon University (CMU), Pittsburgh, USA

M.Sc. in Electrical Engineering 04/2013 – 12/2014
"Hierarchical Age Estimation based on Global and Local Features from Facial Images"
Supervised by Alessandro Koerich, Clinton Fookes
Federal University of Paraná (UFPR), Curitiba, Brazil

B.E. in Computer Engineering (80/100) 02/2007 – 12/2012
Pontifical Catholic University of Paraná (PUCPR), Curitiba, Brazil

Exchange Program in Electrical Engineering 08/2010 – 06/2011
Czech Technical University (CTU), Prague, Czech Republic

Mechatronics Technician (87/100) 02/2003 – 07/2004
ENSITEC High School and Professional Education, Curitiba, Brazil

Experience

Queensland University of Technology — Brisbane, Australia
Research Assistant 02/2016 – 04/2016

- Assistance in writing and revising a grant proposal for the Australian Research Council (ARC)

Renault do Brasil S.A. — Curitiba, Brazil
Algorithm Engineer 04/2012 – 07/2015

- Model-based design of control systems for flex-fuel engines
- Software verification and validation

Medequip Systems (Airsys) — Curitiba, Brazil
Mechatronics Technician 05/2006 – 03/2012

- Design, development and production of medical ventilators
- International technical support
- Certification ISO9001, ISO13485, CE Mark, Inmetro
- Attended the Mechanical Lung Ventilation symposium in Cairo, Egypt (2008)

Skills

Programming Languages: Python, MATLAB, C/C++

Software and Platforms: TensorFlow, PyTorch, Torch, Blender, OpenCV

Awards

Science Without Borders scholarship — Ministry of Education of Brazil, 2015 to 2019

Erasmus Mundus EuBrazil StartUp scholarship — European Commission, 2010 to 2011

Best Student Award — Mechatronics Technician, ENSITEC, 2004

Publications

Conference papers

[1] **Jhony K. Pontes**, Chen Kong, Sridha Sridharan, Simon Lucey, Anders Eriksson, Clinton Fookes, "Image2Mesh: A learning framework for single image 3D reconstruction", Submitted to the *International Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018.

[2] Dominic Jack, **Jhony K. Pontes**, Clinton Fookes, Anders Eriksson, Sareh Shirazi, Frederic Maire, "Learning free-form deformations for 3D object reconstruction", Submitted to the *International Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018.

[3] **Jhony K. Pontes**, Chen Kong, Anders Eriksson, Clinton Fookes, Sridha Sridharan, Simon Lucey, "Compact model representation for 3D reconstruction", *International Conference on 3D Vision (3DV)*, 2017.

[4] **Jhony K. Pontes**, Alessandro L. Koerich, Clinton Fookes, Alceu S. Britto Jr, "Two-stage facial age prediction using group-specific features", *International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2017.

Journals

[5] **Jhony K. Pontes**, Alessandro L. Koerich, Clinton Fookes, Alceu S. Britto Jr, "A flexible hierarchical approach for facial age estimation based on multiple features", Pattern Recognition, Volume 54, Pages 34-51, June 2016.

Patents

[6] Fabio Vicentini, **Jhony K. Pontes**, "Ethanol rate estimation of a flex-fuel engine with ethanol sensor". Renault do Brasil S.A, France FR3043722, 2017.

Presentations

Hierarchical age estimation from unconstrained facial images, STIC AmSud/Capes 2014 workshop, Brazil.