Fundamentals of digital image processing
“Lecture outline”

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Lecture available at http://mathieu.delalandre.free.fr/teachings/image.html

Lecture outline (1)

- CADS “Image Processing and Pattern Recognition” program (TU2, TU4, TU5)

TU2	Starting 6th October
TU4	Starting 10th of November
TU5	Starting 17th of November

TU2 exam	02sd of December
TU5 exam	15th of December?
TU4 defenses	27th of January

Lecture outline (2)

- TU2 - lecture outline

  Part A. Fundamentals of digital image processing “M. Delalandre” - 8h

  Part B. Machine learning, classification and indexing - 14h

  Syntactic and Structural Pattern Recognition (SSPR) “R. Raveaux”

  Statistical Pattern Recognition (SPR) “N. Ragot”

  Part C. Computer Graphics “G. Venturini” - 6h

- TU4 – projects

- TU5 – keynote talks (seminaries)

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Lecture outline (3)

Part A. Fundamentals in digital image processing “M. Delalandre”

1. Introduction to digital image processing
2. Digital image modeling
3. Points-based operators
4. Histograms-based operators
5. Linear filtering

Lectures downloadable from

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Lecture outline (4)

Bibliography (SCD)

1. R.C. Gonzalez, R.E. Woods. Digital Image Processing -Third edition , Pearson International Edition, 2008 (ISBN-13: 9780131687288).
2. E.R Davies. Computer & Machine Vision – Fourth Edition. Academic Press, 2012 (ISBN-13: 978-0123869081).
3. M,S, Nixon and A,S, Aguado, Feature Extraction & Image Processing for Computer Vision, Academic Press, 2012 (978-0123725387),