Soufiane Belharbi

CONTACT

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EDUCATION

Ongoing

PhD thesis: Multi-objectives image labeling.

2014-2017

LITIS EA 4108, Team Apprentissage, INSA de Rouen, www.litislab.eu, www.insa-rouen.fr

Direction: M. Sébastien Adam www.litislab.eu/Members/sadam. co-direction: M. Clément Chatelain clement.chatelain.free.fr, M. Romain Hérault romain.herault.free.fr. Ongoing work: Training neural networks for classification using hints. [Deep learning]

2013-2014

Master 2 in Image and language automatic processing (IMALANG)

UFR des Sciences, campus 2, Caen, ufrsciences.unicaen.fr

machine learning, pattern recognition, data mining, video segmentation and analysis, document engineering, image processing, image indexing, natural language processing, image synthesis, biometry. Rank: 2

2011-2013

Master 1-2 in Multimedia information processing systems (STIM)

UFR des Sciences, Madrillet, Rouen, www.univ-rouen.fr

pattern recognition, combination of information, data mining, statistics, image and signal processing, optimization, numerical filtering, numerical transmission, image compression, document processing, SGBD, coding, networks, management, project management.

2006-2011

Engineer diploma in computer science

École Supérieure d'Informatique (ESI, ex:INI), Algeria, www.esi.dz algorithmics, mathematic-logic, operating system, information system, language theory, networks, compilation, data bases, programs conception, data mining, statistics, electronics, computer architectures.

2006 | Baccalaureate (S),

Lycée SI-ElHawas, Algeria, Mention: Good, Rank: 2

PROFESSIONAL EXPERIENCE

Ongoing 2014-2017	PhD thesis: Multi-objectives image labeling. LITIS EA 4108, Team Apprentissage, INSA de Rouen, www.litislab.eu, www. insa-rouen.fr Direction: M. Sébastien Adam www.litislab.eu/Members/sadam. co-direction: M. Clément Chatelain clement.chatelain.free.fr, M. Romain Hérault romain.herault. free.fr/. Ongoing work: Training neural networks for classification using hints. [deep learning]
2013-2014 6 MONTHS	research internship: Facial landmark detection. Direction: M. Frédéric Jurie jurie.users.greyc.fr, laboratory: Greyc www.greyc.fr, team: Image.
4 MONTHS	Research project: Userpators detection in social networks: an application to soft biometry. Direction: M. Gaël Dias dias.users.greyc.fr
2012-2013	Research internship: Handwriting recognition using conditional random fields.
6 months	Direction: M. Thierry Paquet thierry.paquet.free.fr, Clément Chatelain clement.chatelain.free.fr, laboratoire LITIS www.litislab.eu
2 MONTHS	Research project: GMM application for writer identification in handwritten documents.
3 MONTHS	Direction: M. Laurent Heutte lheutte.free.fr
2011-2012 3 MONTHS	Research project: Document image searching using similarity. Direction: M. Stephane Nicolas stephane.nicolas@univ-rouen.fr
3 MONTHS	Research project: Study of the Haar cascade for face detection in illuminations. Direction: M. Stephane Nicolas stephane.nicolas@univ-rouen.fr
2010-2011	Research project: SVM-one-class application in online signature verification using smart card.
1 YEAR	Direction: Mme. Leila Hamdad l_hamdad@esi.dz, M. Youcef Chibani ychibani@usthb.dz

TEACHING

2016-2017 ongoing

Data mining 2: Courses of Deep Learning 4^{th} year ASI at l'INSA de Rouen.

Introduction to data science (Statistics): TP 2^{nd} year STPI at l'INSA de Rouen.

4 months

Math updates: Algebra et real analysis: TD 3^{rd} year ASI at l'INSA de Rouen.

2015-2016 4 months

Algorithmics and programming: TD/TP 2^{nd} year STPI at l'INSA de Rouen

Introduction to data science (Statistics): TP 2^{nd} year STPI at l'INSA de Rouen.

4 months

Advanced algorithmics and C programming: TP 3^{rd} year ASI at l'INSA de Rouen.

RESEARCH & PUBLICATIONS

Published

- S. Belharbi, C. Chatelain, R. Hérault, S. Adam. *A Unified Neural Based Model for Structured Output Problems*. CAP, 2015.
- S. Belharbi, R. Hérault, C. Chatelain, S. Adam. *Deep Multi-Task Learning with evolving weights*. ESANN 2016.
- S. Belharbi, C. Chatelain, R. Hérault, S. Adam. Learning structured output dependencies using deep neural networks. Deep Learning workshop, ICML, 2015.
- S. Belharbi, R. Hérault, C. Chatelain, S. Adam. *Pondération dynamique dans un cadre multi-tâche pour réseaux de neurones profonds*. RFIA 2016 (session spéciale : apprentissage et vision).

Submitted

- S. Belharbi, R. Hérault, C. Chatelain, S. Adam, M. Chastan, S. Thureau, R. Modzelewski. *Spotting L3 slice in CT scans using deep convolutional network and transfer learning.* Journal Computers in Biology and Medicine.
- S. Belharbi, C. Chatelain, R. Hérault, S. Adam. *Multi-task Learning for Structured Output Prediction*. Journal Neurocomputing. arxiv.org/abs/1504.07550.

Ongoing

S. Belharbi, R. Hérault, C. Chatelain, S. Adam. *Class-invariance Hint: a Multi-task Framework for Training Neural Networks.* (for a journal).

PROGRAMMING LANGUAGES & TOOLS

2015-2016	MATLAB, PASCAL
2014-2015	Python, Theano, bash (Linux)
2013-2014	Matlab, Python, Bash (Linux), PHP, SAS
2012-2013	C++, OPENCV, BASH (LINUX), JAVA, OCATVE, MATLAB, CRFSUITE, HTK
2011-2012	C++, OPENCV, BASH (LINUX), JAVA, OCATVE, MATLAB
2010-2011	HTML, PHP, CSS, JAVASCRIPT, C, C++, SQL SERVER, MYSQL, .NET, JAVA, OPENCV, QT
2009-2010	HTML, PHP, CSS, JAVASCRIPT, C, C++, SQL SERVER, MYSQL, .NET, JAVA
2008-2009	HTML, PHP, CSS, JAVASCRIPT, C, C++
2007-2008	Assembleur, Pascal
2006-2007	Assembleur

LANGUAGES

DIALECT: Algerian

LANGUAGES:

ENGLISH: Read (5/5), Talk (4/5), Write (4/5) KABYLE: Read (0/5), Talk (1/5), Write (0/5) ARABIC: Read (4/5), Talk (4/5), Write (4/5)

Japanese: some spoken words

HOBBIES

Reading: NOVELS

Sport: Running (uphills, long distance)
Art: Cinema, music, photography