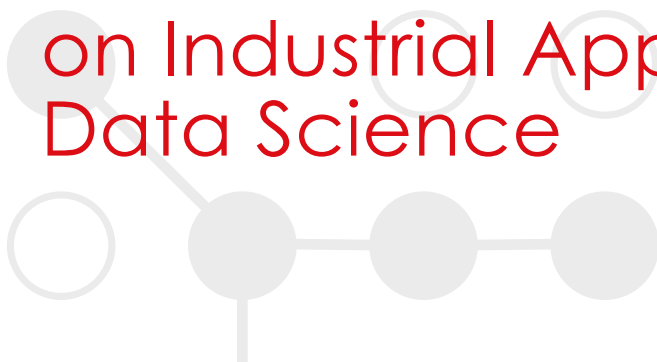# ftal

2018
conference

18-19 October 2018
Lugano, Switzerland

**FTAL conference
on Industrial Applied
Data Science**

FTAL conference 2018

This first joint research conference of Swiss Universities of Applied Sciences (UAS) on Data Science is designed for scientists, professors, and Master students, as well as for industrial partners. The goal of FTAL18 conference is to show UAS's research and applied activities in Data Science, to increase knowledge transfer within the FTAL "Research Community" and to act as a networking event between researchers, Master students in Engineering and Life Sciences and industrial partners.

In order to address the growing influence of Data Science on many aspects of our lives, FTAL, the Association of Swiss Schools of Engineering, Architecture and Life Sciences, organises a scientific conference on applied research activities of its member schools in this field. The first joint research event will focus on industrial applied research outcomes in this highly topical subject, especially in view of the enhanced offer in the following joint Master programs: since autumn 2017 the MSc in Life Sciences offers the new option "Applied Computational Life Sciences" and starting in autumn 2018 the MSc in Engineering will propose the new option "Data Science".

Acronyms and abbreviations

AT	Austria
BFH	Bern University of Applied Sciences
CO	Columbia
DE	Germany
FFHS	Fernfachhochschule Brig
FHNW	University of Applied Sciences and Arts Northwestern Switzerland
FHO	University of Applied Sciences of Eastern Switzerland
FHS	Hochschule für Angewandte Wissenschaftfen St. Gallen
FTAL	Fachkonferenz der technischen Fachbereiche der schweizerischen Fachhochschulen
HE-ARC	School of Engineering Neuchâtel
HEG	School of Business Administration Geneva
HEI	School of Engieneering HES-SO Valais-Wallis Sion
HEIA-FR	School of Engineering and Architecture Fribourg
HEIG-VD	School of Engineering and Management Yverdon-les-Bains
HEPIA	School of Engineering, Architecture and Landscape Geneva
HES-SO	University of Applied Sciences and Arts Western Switzerland
HSLU	Lucerne University of Applied Sciences and Arts
HSR	Hochschule für technik Rapperswil
HTW	Hochschule für Technik und Wirtschaft Chur
IT	Italy
NTB	Interstaatliche Hochschule für Technik Buchs
SUPSI	University of Applied Sciences and Arts of Southern Switzerland
ZHAW	Zurich University of Applied Sciences

Table of contents

Welcome

Dear colleagues, students and guests,

On behalf of FTAL and the hosting University of Applied Sciences and Arts of Southern Switzerland SUPSI, we would like to welcome you to the first FTAL conference 2018 in Lugano.

In a more and more competitive and dynamic global research and innovation framework, the Swiss Universities of Applied Sciences network may represent a crucial actor to support the leading position in innovation held by Switzerland and recognised at international level.

Therefore it will be of major relevance to strengthen the UAS applied research network by increasing mutual knowledge sharing, developing common research projects and acting as networked community towards larger international institutions and industries.

Knowing that and in order to move one step forward in achieving such a valuable objective, FTAL will promote further cooperation among the Swiss UAS systems and its stakeholders, with particular focus on applied research fields of major industrial relevance. In such a context, the first FTAL conference on the topic of Industrial Applied Data Science has been launched in Lugano in 2018.

We are confident that all participating UAS researchers and students, as well as industrial partners, may exploit such an opportunity to increase mutual knowledge, enforce their networks and enjoy our FTAL community: a key actor of growing relevance in the Swiss applied research and innovation system.

Finally, we would like to thank our sponsors, the contributors and all other persons involved in the organisation of this conference, especially the Department of Innovative Technologies of SUPSI, as well as Christine Menghini from the FTAL Office.

We wish you all a fruitful conference and pleasant stay in Lugano.

Prof. Olivier Naef
President FTAL

Prof. Dr. Emanuele Carpanzano
FTAL conference Chairman

Introduction of the scientific committee

Dear colleagues, students and guests,

This first research conference of Swiss Universities of Applied Sciences is devoted to Industrial Applied Data Science. This topic has aroused great interest among researchers and students of the seven Swiss UAS. In total, we have accepted 58 papers divided in four categories, Industry Production and Logistics (12 oral papers and 13 posters), Energy and Environment (7 oral papers and 5 posters), Life Science and Healthcare (9 oral papers and 9 posters) and Finance, eCommerce, Blockchain (with 1 oral paper and 2 posters). Topics span from research on Deep Neural Networks, Advanced Statistics, Machine Learning, Data mining, Bayesian Networks to applications to real-world problems like (among others) 3-D printing, Stroke detection, Mobile data analysis, Time series prediction, Industrial anomaly detection, Microwave tomography and Risk investigation.

With these interesting papers, the conference has been organised with seven oral presentation sections, three sections the first day with three papers each, and four sections the second day with four papers each. A poster session during the first day is devoted to discuss these research subjects and to award the best poster.

The conference also proposes two plenary sessions: the first one with Dr. Alessandro Curioni, IBM Fellow, Vice President Europe and Director, IBM Research – Zurich, titled "Making the Impossible Possible with AI", while the second plenary session is presented by Prof. Dr. Christian Lovis, Professor and chairman

Division of Medical Information Sciences, University Hospitals of Geneva (HUG) who will talk about "Big Data in Health: Hopes and Challenges".

In these two sessions, we will have the opportunity to discuss the state of the art methodologies and to investigate the next challenges in the Data Science discipline.

We also leave room to present UAS activities in data science, with a special section where each UAS is presenting and discussing his running activities in the domain, with the goal of creating further collaborative research opportunities.

Lugano is a wonderful city in this period and you will enjoy the "aperitive riche", lunch and coffee breaks with the opportunity to take advantage of the conference also to engage in networking activities among participants.

On behalf of the Scientific committee, I would like to welcome all of you to this special event.

Prof. Dr. Luca Maria Gambardella
Head of the Scientific committee FTAL conference 2018

Organising institutions

ftal

n|w University of Applied Sciences and Arts
Northwestern Switzerland

F
H
Bern University
of Applied Sciences

Zurich University
of Applied Sciences
zh
aw

FHO
University of Applied Sciences
of Eastern Switzerland

Lucerne University of
Applied Sciences and Arts
HOCHSCHULE
LUZERN
FH Zentralschweiz

Hes·so
Haute École Spécialisée
de Suisse occidentale
Fachhochschule Westschweiz
University of Applied Sciences and Arts
Western Switzerland

University of Applied Sciences and Arts
of Southern Switzerland
SUPSI

The following Universities of Applied
Sciences are members of FTAL

BFH
Bern University of Applied Sciences
Falkenplatz 24
3012 Bern
www.bfh.ch

FHNW
University of Applied Sciences
and Arts Northwestern Switzerland
Bahnhofstrasse 6
5210 Windisch
www.fhnw.ch

FHO
University of Applied Sciences
of Eastern Switzerland
Bogenstrasse 7
9000 St.Gallen
www.fho.ch

HES-SO
University of Applied Sciences
and Arts Western Switzerland
Route de Moutier 14, CP 452
2800 Delémont
www.hes-so.ch

HSLU
Lucerne University of Applied Sciences
and Arts
Hochschule Luzern
Werftestrasse 4
6002 Luzern
www.hslu.ch

SUPSI
University of Applied Sciences
and Arts of Southern Switzerland
Le Gerre, Via Pobiette 11
6928 Manno
www.supsi.ch

ZHAW
Zurich University of Applied Sciences
Gertrudstrasse 15
CH-8401 Winterthur
www.zhaw.ch

Sponsors

Organisation

Golden sponsor

Silver sponsor

Bronze sponsor

Steering committee

Prof. Dr. Emanuele Carpanzano	SUPSI
(FTAL conference Chairman)	
Prof. Olivier Naef *(President FTAL)*	HES-SO
Prof. Dr. Falko Schlottig	FHNW
Prof. Dr. Viktor Sigrist	HSLU

Scientific committee

Prof. Dr. Dominique Brodbeck	FHNW
Prof. Marcel Burkhard	ZHAW
Prof. Dr. André Csillaghy	FHNW
Prof. Dr. Roger Filliger	BFH
Prof. Dr. Luca Maria Gambardella *(Chair)*	SUPSI
Prof. Dr. Martin Melchior	FHNW
Prof. Dr. Elena Mugellini	HES-SO
Prof. Dr. Philippe Passeraub	HES-SO
Prof. Dr. Andres Perez-Uribe	HES-SO
Dr. habil. Michael Schreiner	FHO
Prof. Dr. Philipp Schütz	HSLU
Prof. Dr. Thilo Stadelmann	ZHAW

Local organising committee

SUPSI - Department of Innovative Technologies
Andrea Degiorgi-Wermelinger *(Chair)*,
Matteo Cremaschi, Flavio Righi,
Mariangela Ferracini, Yathusan Ramasamy.

Helpers and volunteers
Staff and students from the University of Applied
Sciences and Arts of Southern Switzerland (SUPSI),
Department of Innovative Technologies.

Practical information

Lago di Lugano

Venue
Lugano Convention Center
Palazzo dei Congressi
Piazza Indipendenza 9
6900 *Lugano*

Date
18th October 2018, 12:00 – 20:00
19th October 2018, 08:00 – 14:30

Emergency contact
Andrea Degiorgi-Wermelinger
+41 (0)79 817 61 18

Parking
It is possible to park the car in the multi-storey car park right in front of the Congress Hall, located under Piazza Castello. Staying overnight in a hotel in Ticino, guests have the possibility to use for free public transport thanks to the "Ticino Ticket" (more information on www.ticino.ch/en/ticket).

Onsite registration
The access to all the congress activities is subject to registration.
All prices are in Swiss Francs (CHF).

Researchers and guests CHF 280.00
Students (only Swiss UAS) CHF 180.00

Items included in the registration fee
Attendance at all sessions from October 18th to 19th, programme, conference bag, lunch (19.10.18), coffee breaks, Reception (18.10.18).

Registration fees do not include transport and accommodation.

Badge
A name badge with your registration documents will be provided upon your registration at the Convention Center. For security and regulations purposes, the wearing of the badge is compulsory at all times inside the Convention Center and during the conference. Only persons wearing a FTAL conference 2018 badge are entitled to attend meetings and refreshments.

WiFi
SSID: PalazzoCongressi
Password: Luga2018

CONGRESS CENTER LUGANO

First floor

B1   B2   B3   C

Ground floor

Main Entrance

Entrance "E"

E

Legenda

- Conference Rooms
- Meeting room
- Registration area and Info point
- Poster session
- Toilets
- Cloakroom
- Coffee breaks
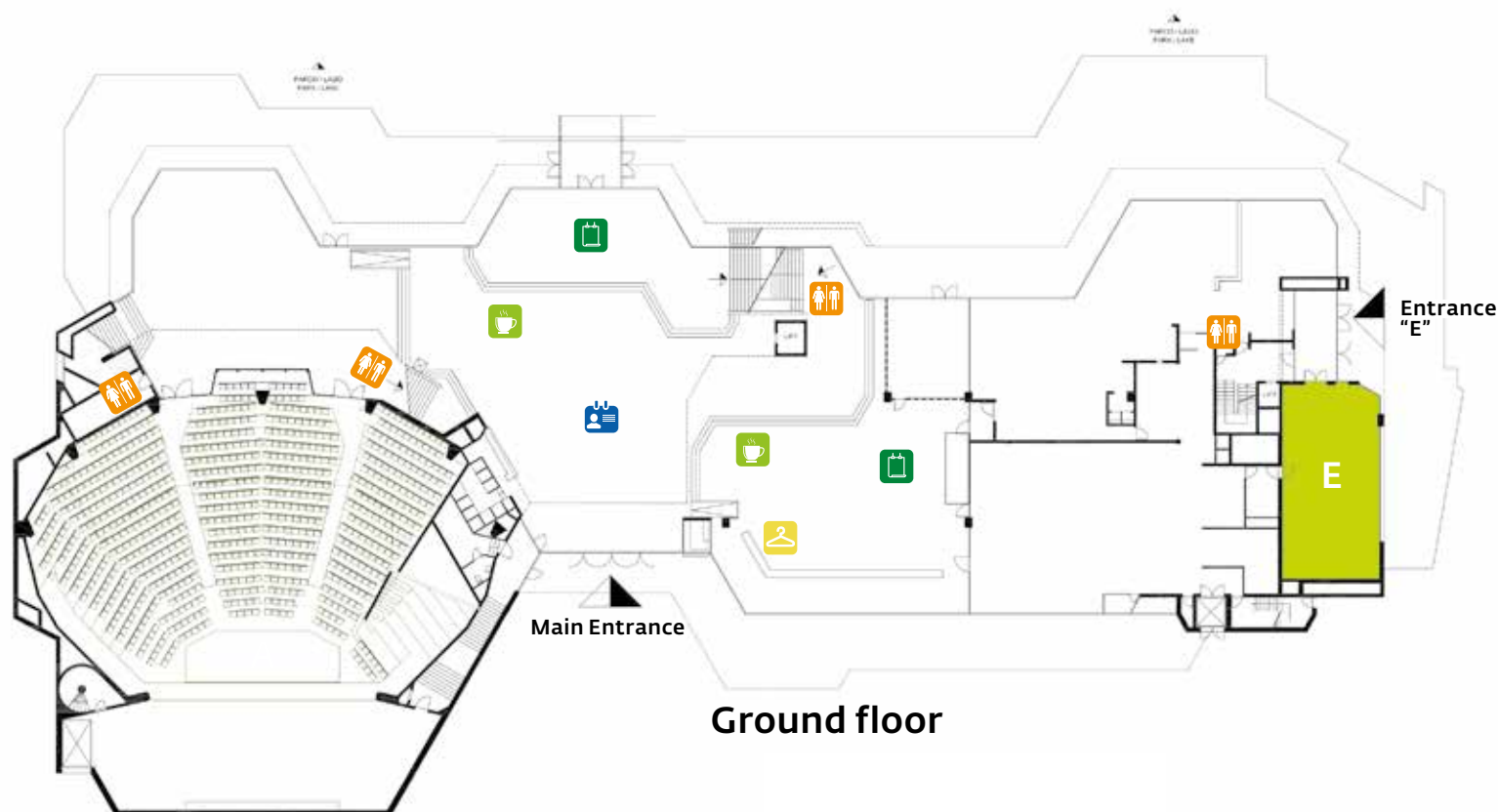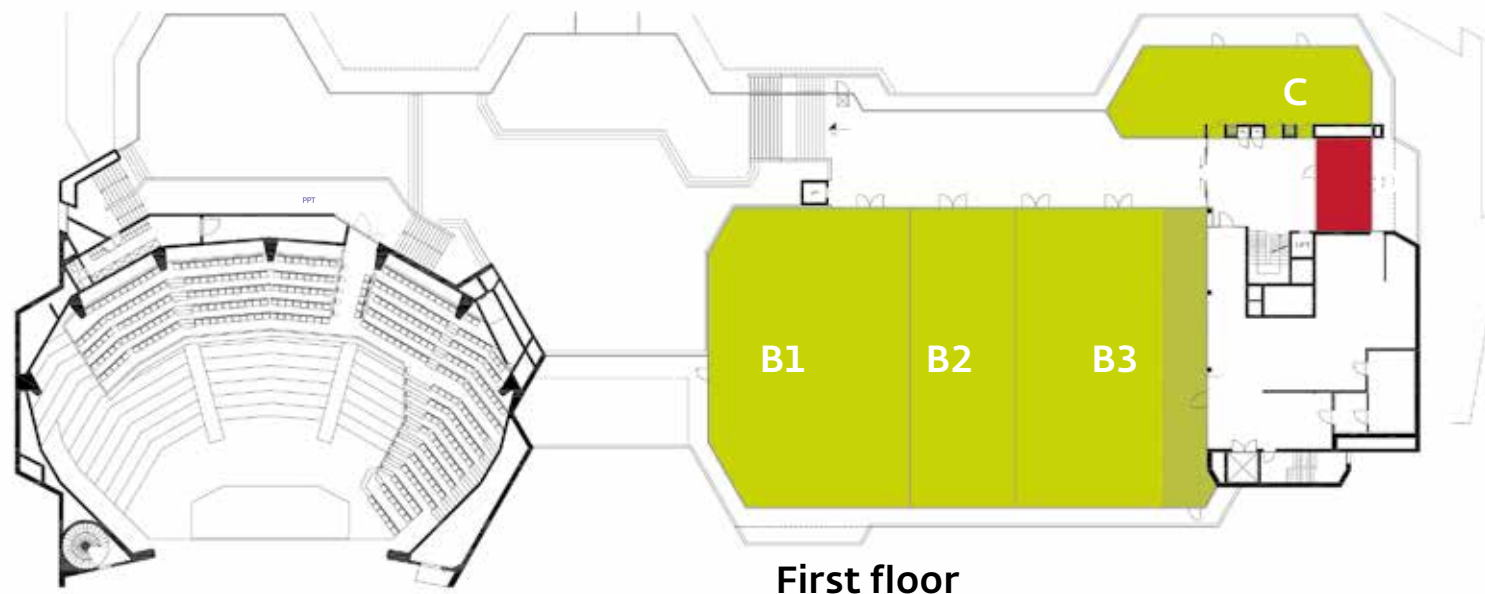
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Day schedule

Thursday, 18th

Room B1 & B2

12:00	**Registration**

13:00	**Opening and welcome address by FTAL** Prof. Olivier Naef President FTAL
	Keynote speaker introduction Prof. Dr. Emanuele Carpanzano FTAL conference Chairman
	Plenary session: *"Making the Impossible Possible with AI"* Dr. Alessandro Curioni, IBM Fellow, Vice President of Europe and Director of the IBM Research lab in Zurich, Switzerland

14:00	**Parallel sessions** Finance, eCommerce and Blockchain *Room B1* Industry Production and Logistics *Room B1* Energy and Environment *Room B3* Life Science and Healthcare *Room C*

15:00	**Coffee break and Poster session**

16:30	**Data Science @FTAL** The different UAS will present their activities related to the Data Science domain

17:50	**Panel – Foundation of FTAL Research Community on Data Science** Prof. Dr. Luca Maria Gambardella Discussion about projects, collaborations, vision and the Foundation of FTAL Research Community on Data Science

18.30	**Reception**

Day schedule

Friday, 19th

Room B1 & B2

<u>09:00</u>	**Keynote speaker introduction**
	Prof. Dr. Luca Maria Gambardella
	Plenary session:
	"Big Data in Health: Hopes and Challenges"
	Prof. Dr. Christian Lovis, Professor and chairman
	Division of Medical Information Sciences,
	University Hospitals of Geneva (HUG)
<u>10:00</u>	**Coffee break**
<u>10:30</u>	**Parallel sessions**
	Industry Production and Logistics
	Room B1/B2/B3
	Energy and Environment
	Room E
	Life Science and Healthcare
	Room B2/C
<u>12.30</u>	**Best poster award**
	FTAL Scientific committee
<u>12.45</u>	**Networking lunch**

Opening session

Making the Impossible Possible with AI

Abstract

After decades of experiencing a slow burn, artificial intelligence innovation has caught fire to become the hottest item on the agendas of the world's top technology firms.

The fuel for this fire? Necessity. Faced with a constant onslaught of data, we needed a new type of system that learns and adapts, and we now have that with AI. What was deemed impossible a few years ago is not only becoming possible, it is very quickly becoming necessary and expected.

As a result there is a race to develop AI solutions that can provide competitive advantage by augmenting human intelligence and they are based on a formula that includes the advent of small data, more efficient deep learning models, deep reasoning, new AI hardware and progress toward unsupervised learning.

Biography

Dr. Alessandro Curioni is an IBM Fellow, Vice President of Europe and Director of the IBM Research lab in Zurich, Switzerland. In addition to leading the IBM Research activities in Europe, he is also responsible for the global research in IoT and Security.

Dr. Curioni is a world recognized leader in the area of high performance computing and computational science where his innovative thinking and seminal contributions have helped solve some of the most complex scientific and technological problems in healthcare, aerospace, consumer goods and electronics. He was a member of the winning team recognized with the prestigious Gordon Bell Prize in 2013 and 2015.

Dr. Curioni received his undergraduate degree in Theoretical Chemistry and his PhD from Scuola Normale Superiore, Pisa, Italy. He started at IBM Research - Zurich as a PhD student in 1993 before officially joining as a research staff member in 1998. His most recent position has been the head of the Cognitive Computing and Computational Sciences department.

In 2017 he was named a member of the Swiss Academy of Engineering Sciences.

Dr. Alessandro Curioni
IBM Fellow, Vice President Europe and Director,
IBM Research lab - Zurich

Plennary session

Big Data in Health:
Hopes and Challenges

Abstract

Personalized and precision medicine, data driven science, artificial intelligence, these last years have seen an impressive raise of digital-related advances that are deeply changing the healthcare system.

However, beside the hype effect, there is still a long way from the lab to the patients and the citizens.

In addition to human factors, societal and legal issues, the success of bridging the gaps will depend a lot on our capacity to address important scientific and technical challenges around data, information and knowledge, improving our capacity to build evidence and to raise trust.

Biography

Prof. Dr. Christian Lovis is professor of clinical informatics at the university of Geneva and chairman of the Division of Medical Information Sciences at the University Hospitals of Geneva.

He is a medical doctor, board certified in Internal Medicine with special emphasis on emergency medicine. He holds a master in public health from the University of Washington.

In parallel to medicine, he studied biomedical informatics at the University of Geneva, focusing on clinical information systems, clinical data interoperability. He is member of the executive board of the Swiss Personalized Health network and president of the European Society of Medical Informatics.

Prof. Dr. Christian Lovis is editorial board member of several peer reviewed journals such as PLOS One and has founded four start-up's. He is the president of the European federation of medical informatics. He has participated to several start-ups.

Prof. Dr. Christian Lovis
Professor and chairman
Division of Medical Information Sciences
University Hospitals of Geneva (HUG)

Thursday, 18th

E

Session Energy and Environment

Room B3

14:00

E-01

Estimating the Signal Strength of LoRaWAN with Regression Kriging
Böckle Josef, Frick Klaus, Anselmi Christian
FHO NTB, Things Logic Network (AT)

14:20

E-02

Energy demand management by increased user awareness
Rizzoli Andrea Emilio
SUPSI

14:40

E-03

Big Data system for pantropical land-cover change monitoring
Perez-Uribe Andres, Satizabal Hector Fabio, Rebetez Julien
HES-SO/HEIG-VD

F

Session Finance, eCommerce and Blockchain

Room B1

F-01

DISCOVER - Deep-Web Knowledge Extraction and Fusion for Improved Decision Making
Weichselbraun Albert, Brasoveanu Adrian M.P., Süsstrunk Norman, Kuntschik Philipp, Hörler Sandro
FHO/HTW

I

Session Industry, Production and Logistics

I-01

A cloud based IoT approach for food safety and quality prediction
Hirsch Sven, Ulzega Simone, Schüle Martin
ZHAW

I-02

Machine Learning for Anomaly Detection in Time-Series Produced by Industrial Processes
Rychener Lorenz, Hennebert Jean
HES-SO/HEIA-FR

L

Session Life Sciences and Healthcare

Room C

L-01

High-level activity recognition for cognitive support in older adults
Perez-Uribe, Satizabal Hector-Fabio
HES-SO/HEIG-VD

L-02

Early Detection of Food Intoxication in Switzerland using Twitter
Casas Jacky, Zufferey Laurent, Abou Khaled Omar, Mugellini Elena
HES-SO/HEIA-FR

L-03

Zero-inflated meta-analysis to model rare side effects of medical interventions
Wandel Jasmin, Wandel Simon
BFH

Friday, 19th

I

Session Industry, Production and Logistic

Room B1	Room B2	Room B3

10:30

I-03
Machine Learning on Accelerometer Data for Detection of Fence Violations
Giusti Alessandro, Broggini Denis, Albertolli Matteo, Dozio Gian Carlo, Foletti Fabio, Rivero Armando, Bernaschina Andrea, Gambardella Luca Maria
SUPSI, Fratelli Albertolli SA

I-09
BBData, a Big Data platform for Smart Buildings
Hennebert Jean, Linder Lucy, Esseiva Julien
HES-SO/HEIA-FR

10:50

I-04
A data-driven monitoring tool to enhance performance of industrial melting processes
Ghorbel Hatem
HES-SO/HE-Arc

I-10
Lessons learned from 16 applied data science (meta) case studies
Stockinger Kurt, Stadelmann Thilo, Braschler Martin
ZHAW

11:10

I-05
Reinforcement Learning in an Industrial Robotics Application
Frick Klaus, Lutz Joel
FHO/NTB

I-07
Developement of an inductive array Sensor for the Detection of Metallic Objects
Gnos Tobias
FHO/NTB

I-11
Image-based Measurement of Material Roughness
Giusti Alessandro, Dotta Matteo, Toniolo Stefano, Boccadoro Marco, Gambardella Luca Maria, Nasciuti Adriano
SUPSI, Agie Charmilles SA

11:30

I-06
Predictive Quality Management with Bayesian Networks
Corani Giorgio, Bonesana Claudio, Monti Andrea, Cannizzaro Daniele, Relea Eduard, Gittler Thomas, Corti Donatella
SUPSI, Agie Charmilles SA, ETH Zurich

I-08
Endowing humanoid robots with the capability of reading and reacting to human body language
Perez-Uribe Andres, Satizabal Hector Fabio, Gonzales Lopez Francisco
HES-SO/HEIG-VD, Universidad Autonoma de Occidente (CO)

I-12
A Framework for Text Analytics with Visual Exploration and Machine Learning
Metzler Linus, Siddiqui Nadina, Tuggener Don, Cieliebak Mark
ZHAW

Friday, 19th

E

Session Energy and Environment

Room E

10:30

E-04
Accurate transport mode detection in Smartphone-based mobility tracking for sustainable mobility applications
Vermes Nicola, Mangili Francesca, Cellina Francesa, José Veiga Simão
SUPSI

10:50

E-05
Detailed data collection and usage allow unprecedented understanding of energy supply and demand dynamics in future smart cities
Capezzali Massimiliano, Fesefeldt Marten, Rager Jakob, Von Gunten Diane, Puerto Pablo; HES-SO/HEI, Centre de recherches énergétiques et municipales

11:10

E-06
Machine learning and optimization for the design of photovoltaic installations
Salani Matteo, Corbellini Gianluca, Corani Giorgio
SUPSI

11:30

E-07
The world's first underground AA-CAES pilot plant: modelling and validation
Roncolato Jonathan, Zavattoni Simone A., Zanganeh Giw, Haselbacher Andreas, Barbato Maurizio C.
SUPSI, ALACAES SA, ETH Zurich

L

Session Life Sciences and Healthcare

Room B2

L-04
Detection of Skin Affliction using Fully Convolutional Neural Networks
Koller Thomas
HSLU

L-05
Deep Learning for Recognizing Sleep Stages from Mobile Sensor Data
Reimer Ulrich
FHO/FHS

Room C

L-06
AI-based prediction of virus-bacteria interactions as a contribution to fight against antibiotic resistance
Leite Diogo, Brochet Xavier, Barreto Sanz Miguel, Que Yok-Ai, Resch Grégory, Peña Carlos Andres; HES-SO/HEIG-VD, Swiss Institute of Bioinformatics, Universitätsspital Bern, University of Lausanne

L-07
D-REX: Improving Deep Neural Networks Understanding via Rule Extraction
Despraz Jérémie, Peña Carlos Andres, Schnyder Stéphane
HES-SO/HEIG-VD, Swiss Institute of Bioinformatics

L-08
Real-Time Detection of Micro-Expressions through New Feature Selection for Helping Doctors to Know Their Patients
Daher Karl, Mugellini Elena, Abou Khaled Omar, Lalanne Denis, HES-SO/HEIA-FR, University of Fribourg

L-09
A Gamification Approach for Diabetes (T1DM) Management and co-morbidities prevention in Adolescents and Children
Luceri Luca, Cardoso Felipe, Leidi Tiziano, Giordano Silvia, SUPSI

Poster session and best poster award

Posters

The organizing committee will set up an exhibition with two-side panels where the posters will be exposed on Thursday, 18th October during the coffee break.

The FTAL organising committee will award the best poster presented at the conference with a special prize of CHF 1,000.

The winner will be selected through a procedure involving all the conference participants, who will receive a voting sheet during the registration reporting the list of posters presented. Following the poster session, each participant will submit his vote.

During the award ceremony (scheduled on Friday, 19th October at 12:30), the winner will present his work in 5 minutes.

Furthermore, following the event, a digital document including the conference proceedings will be published onto the FTAL website.

F-P01

Blockchain technology and decentralized electricity production and trading: towards a peer-to-peer market?
Antonioli Mantegazzini Barbara
SUPSI

F-P02

Hierarchical Perceptual Grouping by using Neural Networks Ent-to-End
Meier Benjamin, Stadelmann Thilo
ZHAW

Session Industry, Production and Logistic

I

I-P01
Analytics in Industry 4.0: Improving Business Processes with Process Mining
Albertetti Fabrizio, Ghorbel Hatem
HES-SO/He-Arc

I-P02
Big data and complex networks approaches drive environment-aware advisory in new products development
Fontana Alessandro, Sorlini Marzio, Giordano Silvia
SUPSI

I-P03
BIOSMART? Optimization Software for Biomaterial Packaging of Food
Rychener Lorenz, Esseiva Julien, Hennebert Jean
HES-SO/HEIA-FR

I-P04
Consumers' Acceptance of the 3D-Printing Technology in Food
Götze Franziska, Delley Mathilde, Denkel Christoph, Brunner Thomas A.
BFH

I-P05
Data extraction methods applied to automated liquid penetrant inspection
Banfi Michele, Chiericati Daniele
SUPSI

I-P06
Data-to-action in a product service system environment? Lessons learnt from a hackathon
Stoll Oliver, West Shaun, Rapaccini Mario, Müller-Csernetzky Petra
HSLU, University of Florence (IT)

I-P07
Dynamic modelling of industrial robots performing Cold Spray processes
Gitardi Diego, Valente Anna
SUPSI

I-P08
Fully Convolutional Neural Networks for Newspaper Article Segmentation
Arnold Marek, Meier Benjamin, Cieliebak Mark, Stadelmann Thilo
ZHAW

I-P09
Innovation management for the development of Smart Services
Livolsi Dominic, West Shaun, Rapaccini Mario
HSLU, University of Florence (IT)

I-P10
Learning from User Clicks on Information Retrieval Ranked Lists
Taranova Anastasia
ZHAW

I-P11
NILM for the Industrial Sector
Huber Patrick, Kaufmann Lukas, Rumsch Andreas, Paice Andrew
HSLU

I-P12
Understanding Wicked Problems to build Smart Solutions
Stoll Oliver, West Shaun, Rapaccini Mario, Müller-Csernetzky Petra
HSLU, University of Florence (IT)

I-P13
Visualization Techniques Applied to a Convolutional Network for Robot Navigation
Patuzzo Fabrizio, Toniolo Stefano, Giusti Alessandro, Guzzi Jerome
SUPSI

Session Life Sciences and healthcare

L-P01
Are you serious? Probabilistic Modelling in Deep Neural Networks
Murina Elvis, Dürr Oliver, Tolkachev Vasily, Sick Beate
ZHAW, HTWG Konstanz (DE), University of Zurich

L-P02
Arthritis Net: Automatic bone erosion scoring for rheumatoid arthritis with deep convolutional neural networks
Rohrbach Janick, Reinhard Fabian, Reinhard Tobias, Dürr Oliver, Sick Beate
ZHAW, Seantis GmbH, HTWG Konstanz (DE), University of Zurich

L-P03
Deep Neural Yodeling
Pfäffli Daniel, Kammermann Andrea, Pouly Marc, Vor Der Brück Tim
HSLU

L-P04
Designing novel peptide-binding proteins from armadillo repeat proteins
Bliven Spencer, Anisimova Maria
ZHAW, Swiss Institute of Bioinformatics

L-P05
Efficient GPU-based Eczema Segmentation with SVMs
Vor Der Brück Tim
HSLU

L-P06
Machine Learning for Real-Time Analysis of Reader Attention by Facial Expression and Eye Tracking Data
Mangili Francesca, Antonucci Alessandro, Poulopoulou Maria Fani, Werlen Egon, Bergamin Per
SUPSI/FFHS

L-P07
Microwave tomograph for medical application
Samuel Poretti
SUPSI

L-P08
Predicting Sleep Apnea Events from ECG Sensor Data: Evaluation of Deep Learning Approaches
Hahn Heiko
FHO/FHS

L-P09
Stroke detection using convolutional neural networks
Herzog Lisa, Murina Elvis, Dürr Oliver, Wegener Susanne, Sick Beate
ZHAW, University Hospital Zurich

Session Energy and Environment

E-P01
Automatic Keyword Extraction from Discourses to Improve Risk Perception, Scenario Planning and Decision Making Processes
Ureta Ivan, Ferrari Alan, Blazquez Victor, Galli Vanni
SUPSI

E-P02
Model based SOH estimation of a LTO/NMC Battery
Schneider Timan, Filliger Roger, Vezzini Andrea
BFH

E-P03
Numerical Analysis of an innovative PCM Storage System, based on climatic data and experimental measurements
Robadey Jacques
HES-SO/HEFR

E-P04
Thermo-chemical district networks
Danesi Serena
ZHAW

E-P05
Valorisation of smart grid monitoring data
Durrer Roman, Businger Felix, Gwerder Damian, Geidl Martin, Cherepanova Margarita, Ackermann Rico, Worlitschek Jörg, Schuetz Philipp
HSLU, Swisscom Energy Solutions, CTC Giersch AG