Doctoral Workshop on
Application of Artificial Intelligence in Manufacturing 4.0
11 - 12 June 2019, Nancy, France

PROGRAMME

Location: AIPL, Faculty of Sciences and Technologies (FST)
(745 Rue du Jardin-Botanique, 54600 Villers-lès-Nancy)

<table>
<tr><th colspan="3">TUESDAY 11 JUNE 2019</th></tr>
<tr><td>08:30-09:00</td><td colspan="2">WELCOME – Room 215</td></tr>
<tr><td>9:00-10:30</td><td colspan="2">- Presentation about of Lorraine university/ CRAN Lab (G.Millerioux)
- Presentation of AIPL (M.Lombard)
- Presentation about Tongji university and lab (L.Li)
- Introduction to the workshop (B. Iung and P.Do)</td></tr>
<tr><td>10:30-11:00</td><td colspan="2">COFFEE BREAK/ EXCHANGE – Room 111</td></tr>
<tr><td>11:00-12:30</td><td colspan="2">Session T1 - Room 215 – chair: Phuc Do

Robust production scheduling under perturbations - A stochastic DES based evaluation approach
Sara Himmiche

Predicting the energy consumption of residential buildings for regional electricity supply-side and demand-side management
Cai Huiling

A selective biogeography-based optimizer considering resource allocation for large-scale global optimization
Cui Meiji</td></tr>
<tr><td>12:30-14:00</td><td colspan="2">LUNCH – Room 111</td></tr>
<tr><td>14:00-15:30</td><td>Session T2 - Room 215 - chair: Hervé Panetto

Personalisation in Cyber-Physical-Social Systems
Bereket Ilma Yilma

A trial of student self-sponsored Peer-to-Peer lending based on credit evaluation using big data analysis
Yujiao Hou

Smart Process Assessment
Marcelo Romero Romero Aquino</td><td>Session T3 - Room 110 - chair: Li Li

Research of Temporal Data Mining and Prediction Analysis on Freight Train Braking System
Wenjing Liu

Educational Barometer for Students: from Learning Process Improvement to System Adoption
Julie Bu Daher

Cooperative Output Regulation of Heterogeneous Multi-agent Systems By Self-triggered
Juan Liu</td></tr>
<tr><td>15:30-16:00</td><td colspan="2">COFFEE BREAK/ EXCHANGE – Room 111</td></tr>
<tr><td>16:00-17:30</td><td>Session T4 - Room 215 - chair: Peng Yan

Collision-free Navigation of Autonomous Vehicles Using Convex Quadratic Programming-based Model Predictive Control
Gangbin Liu

Modeling the impact of disassembly operations on the degradation process of Multi-component systems
Duc-Hanh Dinh

Predictive maintenance for a complex manufacturing system based on opportunistic production-maintenance synchronization
Yong Wang</td><td>Session T5 - Room 110 - chair: Loria/Inria

Clipping useless parameters for specific small datasets
Zhuang Liu

Educational Temporal Pattern Mining using Time Interval
Dermi Oriane

Behavior Represents Achievement: The Utility of Campus Big Data for Predicting Academic Performance
Guang Mei</td></tr>
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WEDNESDAY 12 JUNE 2019

08:00-08:30	WELCOME – Room 111	
08:30-09:00	*Session W1 - Room 215 - chair: Phuc Do* Keynote 1: Autonomous Intelligent Unmanned System (Pr. Li Li)	
09:00-09:30	Keynote 2: Artificial Intelligence ... an advanced technology for "Industry of the Future" ... where Human has an important role to play ! (Pr. Benoit Iung)	
09:30-10:30	*Session W2 - Room 215 - chair: Benoit Iung* Remaining useful life prediction in prognostics using improved recurrent neural networks *Xiaoxiao Zhao* Reliability assessment of optoelectronic devices with accelerated degradation testing *Minh-Tuan Truong*	*Session W3 - Room 110 - chair: Yanmin Zhao* Human-inspired algorithm for designing new Control system in the context of Factory of the future *Tsegay Tesfay Mezgebe* 15-Gas sensor array dynamic measurement uncertainty evaluation and optimization algorithm *Wenwen Zhang*
10:30-11:00	COFFEE BREAK/ EXCHANGE – Room 111	
11:00-12:30	*Session W4 - Room 215 - chair: Phuc Do* IOHMM for Diagnostic and Prognostic of Complex System *Kamrul Islam Shahin* Support Vector Machine based Incremental Classification Algorithm Combing Domain Adaption *Junya Tang* Dynamic grouping maintenance strategy for a geographically dispersed production system *Ho-Si-Hung Nguyen*	*Session W5 - Room 110 - chair: Li Li* Contribution to the identification of dangerous situations and their detection through the analysis of drifts in production equipment. Application to an automated production line *Romain Duponnois* Optimal H∞ Control of Linear System: A Data-Driven Method *Xindi Wang* Intelligent O&M in PV monitoring system Based on Two Unsupervised Baseline Models *Siya Yao*
12:30-13:45	LUNCH – Room 111	
13:45-15:30	Room 215 Working on application of artificial intelligence in manufacturing 4.0	
	Room 110 - chair: Phuc Do Goup 1: *Sara Himmiche,* *Wenjing Liu* *Duc-Hanh Dinh* *Yong Wang* *Dermi Oriane* *Xiaoxiao Zhao* *Kamrul Islam Shahin* *Xindi Wang*	*Room 215 - chair: Li Li* Groupe2 : *Cai Huiling* *Bereket Ilma Yilma* *Juan Liu* *Gangbin Liu* *Zhuang Liu* Truong-Minh Tuan *Tsegay Tesfay Mezgebe* *Junya Tang* *Siya Yao*
		Room 311 - chair: Benoit Iung Goup 3: *Cui Meiji* *Yujiao Hou* *Marcelo Romero Romero Aquino* *Julie Bu Daher* *Guang Mei* *Wenwen Zhang* *Ho-Si-Hung Nguyen* *Romain Duponnois*
15:30-16:00	COFFEE BREAK/EXCHANGE – Room 111	
16:00-17:00	**Room 215:** Short presentation of each working group	
17:00-17:30	- Announcement for best presentation awards - Closing remarks & cocktail	