Master thesis	Students	Promotors

Session : 1 **Computer science for sustainability and for the environment**
Channel — Sustainability_and_Environment
Captaine — mathieu.jadin@uclouvain.be

#	Master thesis	Students	Promotors
		De Carvalho Borges Marcio	
1	LoRa sensors for air quality monitoring in UCLouvain buildings	Dillion Maxime	Sadre Ramin
		Perdaens Olivier	
2	The CO2 credit card	Guillaume Merlin	Contino Francesco ; Limpens Gauthier ; Jeanmart Hervé
		Gevorgyan Edgar	
3	Helping citizens assess and reduce the environmental impact of their emails in the cloud	Marini Mohamed Samir	Riviere Etienne
		Beauvois Mélanie	
4	Suivi automatisé de la faune sauvage	Dierckx Lucile	Nijssen Siegfried ; Bonaventure Olivier
5	Rule-Based Learning for Energy Optimization	Legast Magali	Legay Axel
6	Développement d'une application pour faciliter l'accès et le téléchargement de séries temporelles de données	de la Cruz Mallada Jimmy	Marnik vanclooster
7	Determining Sustainability Scores from Data Online [RESERVED TOPIC]	Van Der Elst Jérôme	Nijssen Siegfried
		Charlier Gilles	
8	Suivi automatisé de la faune sauvage - insectes A	Hick Simon	Bonaventure Olivier
		Beyraghi Vahid	
9	Suivi automatisé de la faune sauvage - insectes B	Thibaut Jonathan	Bonaventure Olivier
10	Nonintrusive Autonomous Water Monitoring System and Water Consumption disaggregation	Di Prinzio Florentin	Schaus Pierre
11	Oil spill detection from satellite images using Convolutional Neural Networks	Legat Guillaume	De Vleeschouwer, Christophe

Session : 2 **Interfaces and interactions**
Channel — Interfaces and Interactions
Captaine — victor.hamer@uclouvain.be

#	Master thesis	Students	Promotors
1	An On-line Interactive Atlas for Gesture-based Interaction	Linsmeau Clément	Vanderdonckt Jean
2	Air+Touch Gesture Recognition: algorithms, software, and Experiment	Neuville Romain	Vanderdonckt Jean
3	Development of Microservices for Automatic Screenshot Evaluation by Visual Metrics	Abdelouassaa Sanae	Vanderdonckt Jean
4	Development of Microservices for Online Evaluation of Graphical User Interfaces	Reginster Guillaume	Vanderdonckt Jean
5	Analysing cloud gaming	Vranckx Florian	Bonaventure Olivier
6	Reinforcement learning based AI to play first-person video games	De Graeve Quentin	Schaus Pierre
7	Deep Learning for 3D Gesture Recognition based on the Walabot radar	Vaneberck Damien	Vanderdonckt Jean
		Wala Gauthier	

Session : 2b - Computer science for society

#	Master thesis	Students	Promotors
1	Opérationnalisation d'une application web de gestion des exploitations maraîchères	de Moffarts Guillaume	Mens Kim
2	Development of a database and web application for the analysis of rainfall data in Haiti	Duprez Florian	Mens Kim ; Soares Frazao Sandra
		Verbois Nicolas	
3	Signature électronique et archivage numérique	Mersch-Mersch Séverine	Deville Yves
		Nicaise Noémie	
4	Efficient, transparent Deep Representation Learning for the Two-Way Job Matching Problem	Maréchal Cyril	Delvenne Jean-Charles
5	Multilabel classification of social events from textual features	Cayphas Nicolas	Dupont Pierre
		Hachem Firas	
6	Development of "citizen science" aspects in a web application for the management of drinking water distribut	Gradzielewski Vincent	Mens Kim ; Soares Frazao Sandra

Session : 3 **Edge computing and smart environments**
Channel — Edge computing and smart environments
Captaine — guillaume.rosinosky@uclouvain.be

#	Master thesis	Students	Promotors
1	User Interfaces for Edge Computing	Ortegat Guillaume	Riviere Etienne ; Vanderdonckt Jean
		Goffinet Stanley	
2	Personal assistants as interfaces for social home care security	Schmitz Donatien	Legay Axel ; Riviere Etienne
3	IoT / SmartHome Activity Detection and Identification (Networking, Machine Learning)	Vivian Martin	Sadre Ramin
		De Keersmaeker François	
4	Louvain-la-Neuve: a Smart City	van de Walle Nicolas	Sadre Ramin ; Deville Yves
		Damhaut Florian	
5	An AI for an Autonomous shuttle in a logistic warehouse	Pletinckx Cyril	Schaus Pierre
6	Doing large-scale computations on an Internet of Things network	Popeler Antoine	Van Roy Peter
		Kalbusch Sébastien	
7	Sensor fusion on an Internet of Things network	Verpoten Vincent	Van Roy Peter
8	Design and Implementation of Insertion Sequence Variables in Mini-CP: applications to scheduling and vehicle	Delmelle Quentin	Schaus Pierre
9	(duplicate)Tracking Objects with several cameras using Deep Learning on Raspberry Pi	Ghaffar Aqsa	Macq Benoît
10	Concurrent Matrix and Vector Functions for Erlang [GRiSP project with Stritzinger]	Losseau Tanguy	Van Roy Peter
11	Flooding in the IS-IS protocol"	Stoz Arnaud	Bonaventure Olivier

Session : 4 **Computer science for healthcare**
Channel — Healthcare and Education
Captaine — charles-henry.bertrand@uclouvain.be

	Master thesis	Students	Promotors
1	Real time tumor tracking using particle filters and application to the optimisation of dose delivery in protontherapie	Little Nathan	Macq Benoît
2	AI for analyzing open-data related to the 2020 coronavirus pandemic	Delecluse Augustin Gérard Margaux	Nijssen Siegfried ; Schaus Pierre
3	Visualization platform for mining large collections of gene expression data	Giot Emile	Dupont Pierre
4	Denoising Monte Carlo doses for fast and accurate proton therapy treatment planning	Semerikova Liliya	Lee John ; Sterpin Edmond
5	High performance computing for simulation of proton therapy treatments.	Froment François	Riviere Etienne ; Lee John
6	Deep learning for cell and bacterial colony counting in vaccine development	Bouterfa Younes	Lee John
7	Deep learning for cell and bacterial colony counting in vaccine development	de Biolley Antoine	Lee John
	Session : 4b - Computer science for education		
1	Mining code for misconceptions of students	Schellekens François	Mens Kim
2	Artificial Intelligence open solution for Virtual Proctoring	Bellon Guillaume	Deville Yves
3	Portail Open Source pour OER (Open Educational Ressources)	Jamar Noémie	Deville Yves
4	Adding Types in Python Programming Courses	Detry Damien	Charles Pecheur

Session : 5	**Communication: better, faster, safer**		
Channel	Communication and Blockchains Security		
Captaine	quentin.deconinck@uclouvain.be		
1	Protocol stack for 802.15.4 based personal network (6LoWPAN) [GRiSP project with Stritzinger]	Bojabza Soukéina	Van Roy Peter
2	Toward verification of QUIC extensions	Crochet Christophe Sambon Jean-François	Legay Axel ; Bonaventure Olivier
3	Efficient transport of video in the home of tomorrow	De Vogeleer Louis	Macq Benoît ; Legat Jean-Didier
4	Improving eBPF verifiers	Rybowski Nicolas	Legay Axel ; Bonaventure Olivier
5	Capacity-achieving packet forwarding through adaptive network coding	Navarre Louis	Bonaventure Olivier
6	Improving Multicast forwarding	Shafiei Sina	Bonaventure Olivier
7	Adaptive large-scale overlays using Gossip-based construction	Bhojane Shraddha	Riviere Etienne
8	New applications above QUIC	van Stratum Arthur	Bonaventure Olivier
	Session : 5b : Blockchains and security		
1	Graph analysis for financial transactions in blockchain-based payment systems	Clement Maxime Moueddene Alexandre	Riviere Etienne ; Schaus Pierre
2	Long-term archives with blockchains	Roose Pierre-Rodéric	Pereira Olivier ; Deville Yves
3	Model Checking of Smart Contracts	Halbardier Alexandre Meerts Martin	Legay Axel
4	Let's visualize malwares!	Michel Benoît	Legay Axel

Session : 6	**Make software engineering great again**		
Channel	Software engineering great again		
Captaine	raziel.carvajal-gomez@uclouvain.be		
1	Context-oriented testing	Martou Pierre	Mens Kim
2	Context-specific composition of features in context-oriented programming	Martin Pierre	Mens Kim
3	AutoML: Automated Machine Learning	Carvalho Alisson	Nijssen Siegfried
4	Deep Learning for Software Engineering	Mulders Gildas	Nijssen Siegfried
5	Divergence visualization in Lasp program execution	Creupelandt Grégory	Van Roy Peter
6	A new syntax for Oz that supports advanced programming idioms (part 2)	Vandenbussche Martin	Van Roy Peter
7	Implémentation de la fonction ode45 dans python	De Clercq Louis	Legat Vincent
8	Interoperable protocol plugins	Gobeaux Alexandre	Bonaventure Olivier
9	Can Data Mining Discover Software Changes?	Hauspie Quentin	Mens Kim ; Nijssen Siegfried
10	Using Python to Mine for Patterns in Software	Quinet Loïc	Mens Kim ; Nijssen Siegfried

Session : 7	**Foundations and applications of machine learning**		
Channel	Machine Learning		
Captaine	alexander.gerniers@uclouvain.be		
1	Investigating deep neural networks learning dynamics and generalization properties	Peiffer Gilles	De Vleeschouwer Christophe
2	Pattern Visualisation in Heat Maps	Van Vracem Gauthier	Nijssen Siegfried
3	Deep feature selection	Ayouaz Rayan	Dupont Pierre
4	Augmented data in machine learning	Reniers Thomas	Lee John ; Verleysen Michel
5	Software development for interactive visualization of high-dimensional data	Lambert Pierre	Lee John ; Verleysen Michel
6	FHE and machine learning	Brabant Matthieu	Pereira Olivier
7	Data journalism and machine learning security	Bogaert Jérémie	Standaert François-Xavier
8	JPEG-XS image compression for Deep Learning of Convolutional Neural Networks	Masy Maxime	Macq Benoît
9	Optimization of the software infrastructure for the storage and analysis of mass spectrometry data (reserved f	Maes Kilian	Dupont Pierre
10	Automatic tuning and interactive visualisation of clusters of single cell expression data	Piron Henri	Dupont Pierre
11	FPGA-based Accelerator for Deep Learning	Vlaeminck Jean-Martin	Legat Jean-Didier ; Christophe De Vleeschouwer
12	Machine learning for IoT with GRiSP and Achlys	Moya Rodriguez Pablo Bosco	Van Roy Peter