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PERMANENT ADDRESS
Asnières, Ile de France,
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France

RESEARCH INTERESTS

My current research focuses on applying parallel processing techniques on mobile device heterogeneous architecture (CPU and GPU) in order to locally perform machine learning tasks, such as Deep Learning training and prediction. My domain of expertise consists in a strong knowledge of mobile device SoC architecture (including multicores CPU and GPU) combined to a smart utilization of parallel computing approaches, such as GPGPU techniques (CUDA, OpenCL).

EDUCATION

2012 - Present: **National Taiwan University**
No. 22 university in Computer Science in the world (ARWU 2014)
Ph.D candidate, Computer and Information Engineering.
Parallel and Distributed Processing Lab

2010 - 2011: **Université du Québec à Chicoutimi - Québec, Canada**
Obtained a *Master's in a Computer Science Master*'s program.

2006 - 2010: **EPF-Graduate School of Engineering - Paris France**
Obtained a *Master's in Engineering* with a specialization in Information and Communication Systems Management with an option in IT Computer Sciences.

2006: **Montalembert - Courbevoie - France**
Scientific "baccalaureate" graduated with honors.

EXPERIENCE

2016-Present: **Research Center for Information Technology Innovation**
Implemented a Deep Learning system specifically designed for performing training and prediction tasks on mobile device's SoC.

2013-2015: **Research project in collaboration with the "Institute for Information Industry".**

- Designed and implemented a parallel PCA-based machine-learning system for heterogeneous system, on a mobile device.
- Designed and implemented a partial computation offloading system, for heterogeneous system in a mobile cloud computing context.

2011 - 2012: **Intern during 7 months, in "Industrial Technology Research Institute" - Taiwan**

- Worked on a Cloud OS system, and more specifically on the Physical Resource Management node (PRM), which provides the foundation software services(PXE,DHCP, DNS, kickstart, etc), and manage the deployment of the Cloud OS.
- Main objectives:
  1. Improving the Cloud OS deployment system to make it dynamical.

2. Speeding up the Cloud OS deployment system. The solution proposed is to create an image from scratch and to remotely install it on our cluster using rsync, Multicast, or BitTorrent transport.
3. Researching a way to provides a diskless environment for client machines.

2010-2011: **Consultant for Samsung for EPF's junior enterprise - France**
Designed smartphone applications on BADA Samsung's operating system.

2008-2010 : **IT Director for the robotics-association of EPF - France**
Participated to the French Robotics Cup.

2009: **Intern in SNECMA Group (SAFRAN group) - Villaroche, France**
Improved a Human Machine Interface for a plane motor simulator.

COMPUTER SKILLS.

- Programming Languages: Delphi, C, C++, Java, PHP, Python, CUDA, OpenCL.
- Machine learning: Deep Learning (ANN, CNN ...), PCA, LDA, SVM,
- Specific programming language for robotics : PIC programming.
- Web development: HTML, CSS, XML, XSLT, JavaScript, Ajax, Microsoft .NET Framework, JSON, JDBC, Tomcat.
- Formal language : Prolog, LaTeX, MATLAB, MPLAB
- Game development: Unity 3D

LANGUAGES:

- French: Native language
- English: Fluent.
- Chinese: Very good command (B2)
- Spanish: Good working knowledge

PAPER PUBLISHED

- **An OpenCL framework for partial workload offloading in a mobile cloud computing environment** (CTHPC 2016)
  Olivier Valery, Ju-Cheng Chou, Yulin Tsao, Pangfeng Liu, and Jan-Jan Wu
- **A partial workload offloading framework in a mobile cloud computing context** (SOCA 2015)
  Olivier Valery, Ju-Cheng Chou, Yulin Tsao, Pangfeng Liu, and Jan-Jan Wu
- **Adaptive OpenCL Computation Offloading Framework on Mobile Device** (ICS 2014)
  Olivier Valery, Wei-Shu Hung, Ju-Cheng Chou, Pangfeng Liu, and Jan-Jan Wu

APPLICABLE COURSEWORK

National Taiwan university:

Cumulative GPA:4.01

- Computing Theory: A
- Artificial Intelligence: A+
- Advanced Operating System: A
- Topics in Cloud Computing: A