Olivier Valery (歐力偉)
d01922033@ntu.edu.tw
+886 988473087

PRESENT ADDRESS
台北市辛亥路三段157巷10號
Taipei, Da'an District
No. 10, Lane 157, Section 3, Xinhai Rd,
Taiwan, R.O.C.

PERMANENT ADDRESS
Asnières, Ile de France,
3 rue Auguste Mayet.
France

EDUCATION

2012 - Present: **National Taiwan University**
Ph.D candidate, Computer and Information Engineering.
Parallel and Distributed Processing Lab

2015 and 2017: **National Chengchi University**
Chinese study

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 project - "Research Center for Information Technology Innovation (Academica Sinica)"**

- Designed and implemented a Deep Learning system specifically designed for performing training and prediction tasks on mobile device's SoC.
- Improved our system and implemented a Transfer Learning framework on mobile device
- Used low-precision arithmetic to speed our framework on mobile device

2013-2015: **Research project - "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 - "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: C, C++, Java, Python, OpenCL, CUDA, PHP, Delphi.
- Machine learning: Deep Learning (DNN, CNN, RNN), Chatbot, PCA, LDA, SVM,
- Specific programming language for robotics : PIC programming.
- Virtualization: Docker, VMware, Cloud OS
- Web development: HTML, CSS, XML, JavaScript, 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

- **Low precision deep learning training on mobile heterogeneous platform** (PDP 2018 - under review)
  Olivier Valery, Pangfeng Liu, and Jan-Jan Wu
- **CPU/GPU Collaboration Techniques for Transfer Learning on Mobile Devices.** (ICPADS 2017)
  Olivier Valery, Pangfeng Liu, and Jan-Jan Wu
- **A Collaborative CPU-GPU Approach for Deep Learning on Mobile Devices** (TECS - under revision)
  Olivier Valery, Pangfeng Liu, and Jan-Jan Wu
- **A Collaborative CPU-GPU Approach for Principal Component Analysis on Mobile Heterogeneous Platforms** (JPDC - under revision)
  Olivier Valery, Pangfeng Liu, and Jan-Jan Wu
- **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