

Vous êtes développeur, programmeur C/C++, Fortran ou Python**, architecte logiciel, expert HPC et IA, ingénieur ou chercheur scientifique: rejoignez-nous pour un atelier de développement software sur les plateformes Intel. Intel® Software et Microsigma vous donnent rendez-vous le mercredi 18 mars 2020 à Paris.

Nos experts aborderont en détails les architectures hardware Intel® actuelles et futures, ainsi que toutes les nouveautés intégrées dans Intel® Parallel Studio XE 2020 et en avant-première le toolkit de prochaine génération Intel® oneAPI qui permettra et facilitera le développement multi-architectures CPU, GPU et FPGA. Les présentations seront faites en français et en anglais.



AGENDA*

Horaire	Session
08:15 – 09:30	Registration & Light breakfast
	Matinée: développer pour le maximum de performance
09:30 -10:15	A refresher on the Intel® Hardware Architecture for Software Developers and Architects This session will offer in-depth insights into the current and future Intel® hardware platforms tailored to the needs of software developers, software architects, HPC and AI experts. We will cover the latest Intel® processors and the future Intel® GPU architecture.
10:15 – 11:00	Developing code for Intel® Architecture: how to achieve maximum performance using the new Intel® Parallel Studio XE 2020 Learn how Intel® Software Development Tools will help you to achieve optimal performance in your HighPerformance Computing, Artificial Intelligence and IoT projects. Includes a look at the new Intel® Parallel Studio XE 2020 tools which are designed to take advantage of the latest generation of Intel® processors.
11:00 – 11:15	Pause café
11:15 – 12:30	How to optimize and maximize code performance Learn how to use some of the advanced features of Intel® VTune™ Amplifier profile your applications. See how you can use event-based and architectural analysis to fine-tune your code so that it is taking full advantage of the latest processor features of the target CPU. Learn how to use Intel® Advisor, a powerful tool for tracking down and solving vectorization problems. In this session we will demonstrate how the Intel® Advisor vector analysis and associated Roofline Model can be used to identify and help fixing vectorization problems.
12:30 – 13:30	Pause Déjeuner
	Après-midi: Intel® oneAPI
13:30 – 14:30	Software Developers: what you need to know about the Intel® oneAPI project Hear about the latest update on the "Intel® oneAPI" project: a unified programming model to simplify application development across diverse computing architectures. Intel® oneAPI supports direct programming and API programming and will deliver a unified language and libraries that offer full native code performance across a range of hardware, including CPUs, GPUs, FPGAs and AI accelerators.
14:30 – 15:15	Offload Advisor: How to decide which parts of the code need to be offloaded?
15:15 - 15:30	Pause café
15:30 – 16:15	Introduction to Data Parallel C++ (DPC++): vector addition sample, device selector
16:15 - 17:30	Case study on Iso3DFD**. From serial to DPC++ version using Intel® oneAPI In this last case study, we will demonstrate how to use offload advisor to select which loops can be offloaded. We will guide the user through the dpcpp implementation using local and global nd-range, playing with device selectors, adding blocking in the kernel and showing roofline model on the GPU.
17:30 – 19:00	Cocktail & Networking

*Agenda sous réserve de modification.

**Les autres noms et marques peuvent être revendiqués comme la propriété de tiers.