WORKSHOP PROGRAM

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Has Silicon Photonics finally found its killer application?

Wednesday March 27, 2024



5:10 pm - 5:20 pm | Welcoming words

5:20 pm - 7:30 pm | Speakers presentations



Vladimir Kozlov - LightCounting The evolving role of optics in AI Clusters

Abstract: This presentation will discuss the evolving role of optics in AI Clusters, covering both connectivity and switching. It will feature data for the sales of optical transceivers, AOCs and DACs for compute nodes and AI Clusters in Cloud datacenters for 2021-2023 with a forecast for 2024-2029. Use of optical connectivity for NVlink and CXL/PCIe in the implementation of AI Cluster architectures will also be discussed.



Mikael Sahrling - TSMC

With all the AI hype in Photonics – can manufacturers meet the expectations?

Abstract: The extraordinary promise of data processing (AI) in the photonics domain, where power is cheap and data processing is scalable in terms of number of wavelengths available, can revolutionize the future. This talk highlights some of the manufacturing challenges involved, including the electrical interface and attempts to glimpse into the future.



Giorgio Cazzaniga - Jabil

Photonics Packaging – a key aspect for AI-driven mass scale production

Abstract: High-speed interconnections required by AI applications are accelerating the adoption of Silicon Photonics-based designs for standard transceivers with higher rates or for more integrated solutions (like CPO). This implies the need for a manufacturing photonics packaging process with large-scale manufacturing capabilities in place. The presentation will focus on process requirements coming from AIdriven applications and the way the industry is approaching the topic.



Lieven Verslegers - Google

Silicon Photonics Opportunities for Optical Interconnects

Abstract: We provide an overview of Google's optical technology needs for AI/ML and datacenter networking and discuss opportunities for silicon photonics to meet our growing bandwidth demands.



Henning Lysdal - Nvidia

Optical Opportunities and Challenges in AI Factories

Abstract: The datacenter operators of the World are entering the Age of AI at unprecedented pace. AI factories deliver compute at a larger scale than ever and are stretching the limits of all the underlying technologies - including optical. Silicon Photonics does much to move those limits, but there is still work to be done before AI can become the killer app for this technology.

7:00 pm - 7:30 pm | Panel discussion

7:30 pm - 8:30 pm | Networking reception

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