ENERGY EFFICIENT COMPUTING FOR AUTOMATED VEHICLES

MAY 11-12, 2021 | ONLINE MEETING

WORKSHOP AGENDA

MAY 11, 2021

TIME	EVENT	SPEAKER
8:30-8:40 am (PDT)	**Welcome and Introduction** Purpose of workshop; desired outcome	Zhiyong Li, SNL
8:40-8:50 am	**Opening Remarks** National imperative on energy topics, transportation and energy systems	Sarah Allendorf, SNL
8:50-9:00 am	**Organizing Team Introduction** OEM/semiconductor/academic/national lab perspectives on energy efficient computing for automated vehicles	Organizing Team
9:00-9:40 am	**Overview of the Semiconductor Projection and Automated Vehicle Development Projection** Semiconductor industry landscape/projections and AV industry landscape/projections for the next generation	Matt Marinella, SNL Jace Mogill, USCAR
9:40-10:00 am	**Feedback on overview**	All participants
10:00-10:10 am	**Break**	
10:10-10:40 am	**Overview of the Roadmap Scope and Outline** Discussion of the philosophy behind the roadmap (timeline and scope), computational energy efficiency from the supply side (chip technology) and the demand side (vehicle implementation)	Lennie Klebanoff, SNL
10:40-11:30 am	**Feedback on Roadmap Scope and Outline** • Will majority of the computation be on the vehicle? • What is the sustainable power limit for onboard computing? • Can CMOS meet AV need for 2030 and beyond?	All participants
11:30-11:50 am	**Feedback Summary**	Carrie Burchard, SNL Lennie Klebanoff, SNL
11:50-12:00 pm	**Preview of Day 2 Activity** Adjourn for Day 1	Zhiyong Li, SNL

MAY 12, 2021

TIME	EVENT	SPEAKER
8:00-8:05 am (PDT)	**Introduction of Day 2** Expectation and Outcome	Lennie Klebanoff, SNL
8:05-9:05 am	**Technical Area 1 - Materials, Devices and Circuits** **Feedback Session**	John Paul Strachan, HPE Session Chair
9:05-10:05 am	**Technical Area 2 - Architecture, Safety and Security** **Feedback Session**	Rob Aitken, ARM Session Chair
10:05-10:15 am	**Break**	
10:15-11:15 am	**Technical Area 3 - Algorithms & Data Management** **Feedback Session**	Robert Dick, University of Michigan Session Chair
11:15-12:15 pm	**Technical Area 4 - Sensor Data Interface** **Feedback Session**	Jace Mogill, USCAR Session Chair
12:15-12:30 pm	**Review Feedback Summary** We'll reflect back to the group the feedback we captured. • Did we miss anything? • Did we capture the feedback correctly? • Additional questionnaire • Next Steps	Carrie Burchard, SNL Lennie Klebanoff, SNL
12:30-12:35 pm	**Closing Remarks**	Sarah Allendorf, SNL

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