DAY ONE MORNING AGENDA

Wednesday, February 12

7:00 am – 8:00 am	**Registration and Breakfast**
8:00 am – 8:15 am	**Welcome and Opening Remarks** *Evgeni Gousev, Senior Director of Engineering, Qualcomm AI Research*
8:15 am – 10:20 am	**SESSION ONE** **ADVANCING THE FRONTIER OF DEEP LEARNING ALGORITHMS AT THE EDGE – PART I** *Session Leader: Kurt Keutzer, Professor, University of California, Berkeley* ▪ **Resource Efficient ML in a Few KBs of RAM** Prateek Jain, Senior Principal Researcher, Microsoft Research India ▪ **Hardware-aware Neural Architecture Search and Compression for Efficient Deep Learning** Yujun Lin and Prof. Song Han, MIT EECS ▪ **MobileNets on the Edge** Andrew Howard, Staff Software Engineer, Google AI ▪ **TinyML Audio Algorithms** Shih-Chii Liu, Professor, University of Zurich and ETH Zurich ▪ **Efficient Deep Learning on the Edge** Bichen Wu, Facebook
10:20 am – 11:00 am	**Demo Pitches (1 minute "elevator pitch" for each demo)**
11:00 am – 11:15 am	**Break**
11:15 am – 12:00 am	**PANEL DISCUSSION:** **HOW TO BUILD A TINYML COMPANY** *Led by Chris Rowen, co-founder and CEO, BabbleLabs* **Panelists:** ▪ Rajeev Madhavan, Clear Ventures ▪ Mike Pinelis, MicroTech Ventures ▪ Vidya Raman, Sorenson Ventures ▪ Albert Wang, Qualcomm Ventures
12:00 am – 12:30 pm	**Day 1 Poster Pitches (1 minute "elevator pitch" for each poster)**
12:30 pm – 1:30 pm	**Lunch**

DAY ONE AFTERNOON AGENDA

Wednesday, February 12

1:30 pm – 2:15 pm	**Poster and Demo Presentations/Networking**
2:15 pm – 4:00 pm	**SESSION TWO** **TINYML SYSTEMS AND APPLICATIONS** *Session Leader: Hoi-Jun Yoo, KAIST ICT Endowed Chair, Professor School of Engineering, KAIST* ▪ **Next Generation Machine Learning for Mobile and Embedded Platforms** Sang Won Lee, CEO, Qeexo ▪ **Some Micro Robots that Need ML** Kris Pister, Professor, Electrical Engineering and Computer Sciences, UC Berkeley ▪ **Voice Separation with tinyML on the Edge** Dr. Niels H. Pontoppidan, Research Area Manager, Augmented Hearing Science Eriksholm Research Centre, Oticon ▪ **Perception Needs for Extended Reality Headsets** Ashwin Swaminathan, Senior Director of Perception, Magic Leap
4:00 pm – 5:00 pm	**Poster and Demo Presentations/Networking**
5:15 pm – 6:15 pm	**Reception**
6:30 pm – 8:00 pm	**Dinner**

DAY TWO MORNING AGENDA

Thursday, February 13

7:00 am – 8:00 am	**Registration and Breakfast**
8:00 am – 8:30 am	**Welcome and Opening Remarks** *Evgeni Gousev, Senior Director of Engineering, Qualcomm AI Research*
8:30 am - 10:15 am	**SESSION THREE** **TINYML HARDWARE** *Session Leader: Edith Beigné, Silicon Research Manager, Facebook* ▪ **Thinking Big with Tiny ML: Low Power High Performance DNN Accelerators for Mobile and IoT Applications** Hoi-Jun Yoo, KAIST ICT Endowed Chair Professor, School of Electrical Engineering, KAIST ▪ **Energy-efficient On-device Processing for Next-generation Endpoint ML** Tomas Edsö, Senior Principal Engineer (ML), Arm ▪ **Robust Always-On Battery Powered Voice with Highly Efficient Edge Neural Compute** Stephen Bailey, VP Software, Syntiant ▪ **A ½ mWatt, 128-MAC Sparsity Aware Neural Processing Unit for Classification and Semantic Segmentation** Joseph Hassoun, Sr. Director of Neural Processor Architecture, Samsung Semiconductor
10:15 am – 10:45 am	**Break**
10:45 am – 11:30 am	**PANEL DISCUSSION:** **THE ROLE OF NVM, EMERGING MEMORIES AND IN-MEMORY COMPUTE FOR EDGE AI** *Led by Boris Murmann, Professor of Electrical Engineering, Stanford University* **Panelists:** ▪ Geoffrey Burr, IBM ▪ Manar Chammas, d-matrix ▪ Jae-sun Seo, Arizona State University ▪ Joseph Wang, Qualcomm
11:30 am – 12:00 pm	**Day 2 Poster Pitches (1 minute "elevator pitch" for each poster)**
12:00 pm – 1:00 pm	**Lunch**

DAY TWO AFTERNOON AGENDA

Thursday, February 13

1:00 pm – 2:15 pm	**Poster and Demo Presentations/Networking**
2:15 pm – 4:15 pm	**SESSION FOUR** **ADVANCING THE FRONTIER OF DEEP LEARNING ALGORITHMS AT THE EDGE – PART II** *Session Leader: Ofer Dekel, Microsoft Partner and Principal Research Manager, Microsoft Research AI* ▪ **Deep Model Compression and Acceleration Toward On-Device AI** Changkyu Choi, Lab Director, Vice President, Computer Vision Lab Samsung Advanced Institute of Technology (SAIT), Samsung Electronics Co., Ltd. ▪ **Making it Easy to Optimize and Deploy Tiny Machine Learning on STM32 Microcontrollers** Matthieu Durnerin, Artificial Intelligence Applications, Algorithms and Tools Manager STMicroelectronics ▪ **Approaches for Optimizing Inference for Edge Devices** Harris Teague, Principal Engineer, Qualcomm AI Research ▪ **tinyMLPerf: Benchmarking Ultra-low Power Machine Learning Systems** Vijay Janapa Reddi, Ph. D., Associate Professor, John A. Paulson School of Engineering and Applied Sciences, Harvard University ▪ **Presentation title to come** Jason Knight, Co-founder and CPO, OctoML
4:15 pm – 5:00 pm	**Final Poster and Demo Viewing/Networking**
5:00 pm	**Adjourn**