

# tinyML<sup>®</sup> Talks

*Enabling Ultra-low Power Machine Learning at the Edge*

## “tinyML Seattle Social”

Bob Allen – Founder, Solve for Why, LLC  
Max Petrenko – Principal Scientist, Amazon

October 19, 2023



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for committing to take tinyML to the next Level, together



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# Executive Strategic Partners

**Qualcomm**  
AI research

# Advancing AI research to make efficient AI ubiquitous

## Power efficiency

Model design, compression, quantization, algorithms, efficient hardware, software tool

## Personalization

Continuous learning, contextual, always-on, privacy-preserved, distributed learning

## Efficient learning

Robust learning through minimal data, unsupervised learning, on-device learning

## A platform to scale AI across the industry



### Perception

Object detection, speech recognition, contextual fusion



### Reasoning

Scene understanding, language understanding, behavior prediction



### Action

Reinforcement learning for decision making



Edge cloud



Cloud



IoT/IIoT



Automotive



Mobile



Accelerate Your Edge Compute

**SYNTIANT**

Making Edge AI A Reality

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**EDGE IMPULSE**

# The Leading Development Platform for Edge ML

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Decarbonization

Digitalization



Driving decarbonization and digitalization. Together.

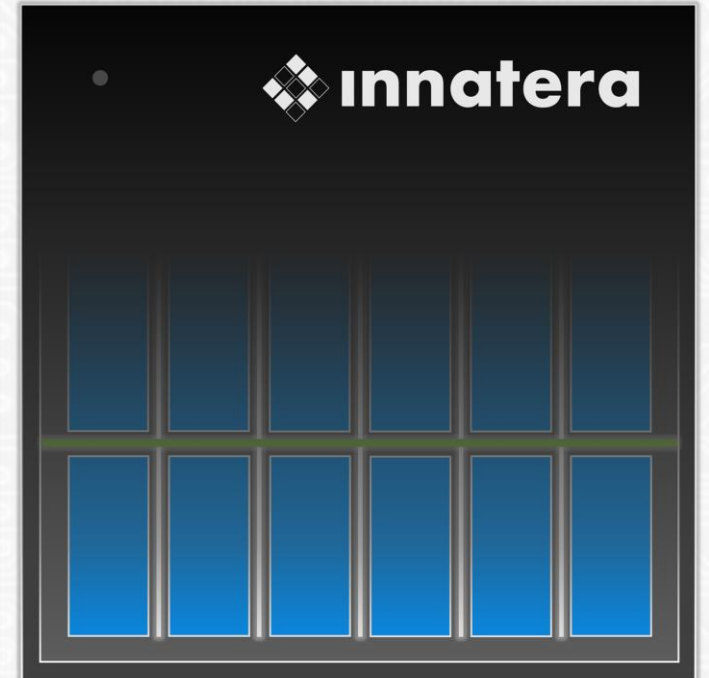
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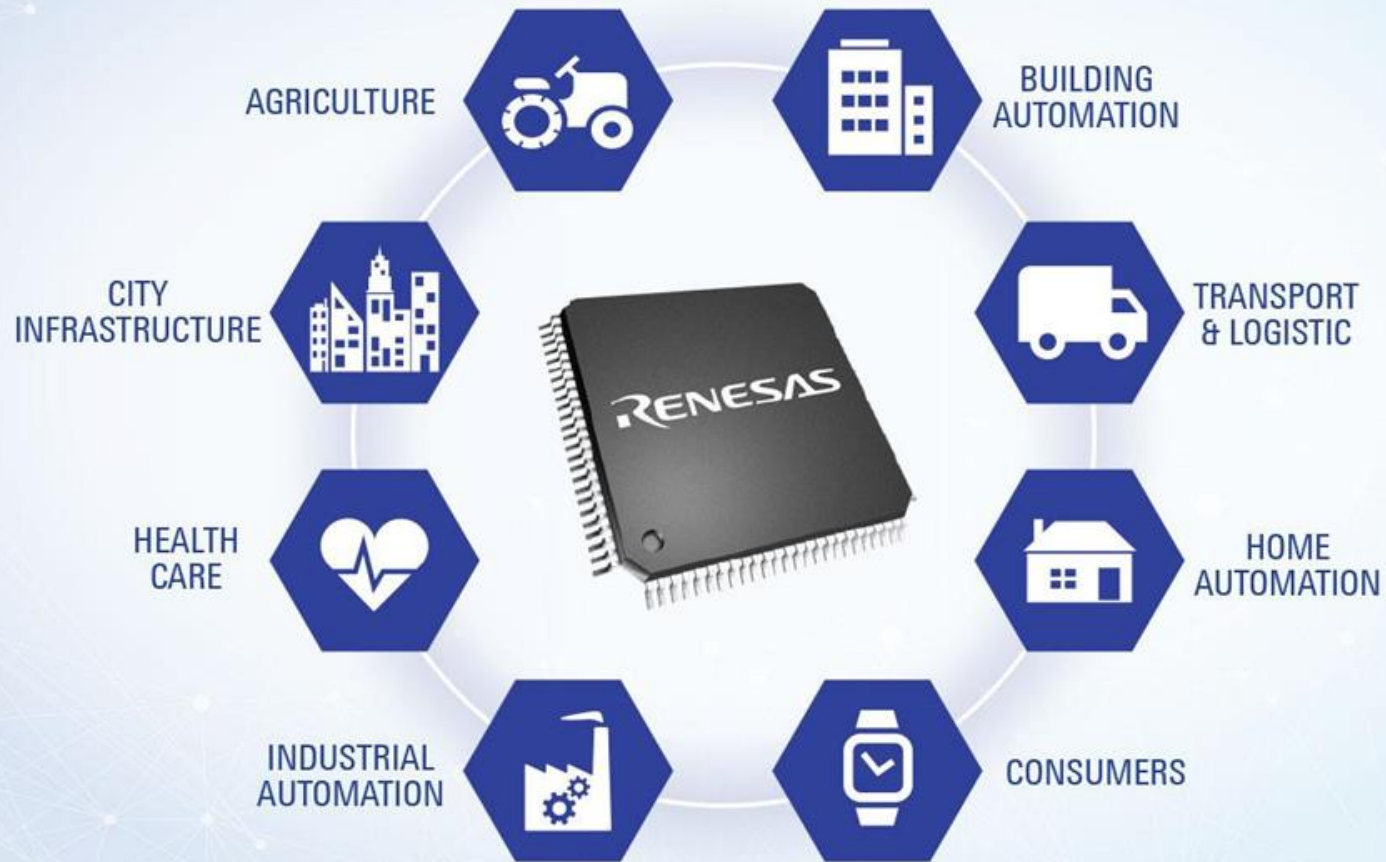


# NEUROMORPHIC INTELLIGENCE FOR THE SENSOR-EDGE



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# tinyML Asia Technical Forum

**November 16, 2023  
Seoul, South Korea**



**Register now**  
**<https://www.tinymml.org/event/asia-2023/>**

# 2023 Edge AI Technology Report

The guide to understanding the state of the art in hardware & software in Edge AI.



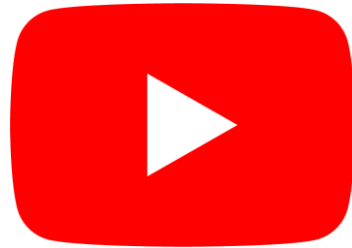


# Reminders

Slides & Videos will be posted tomorrow



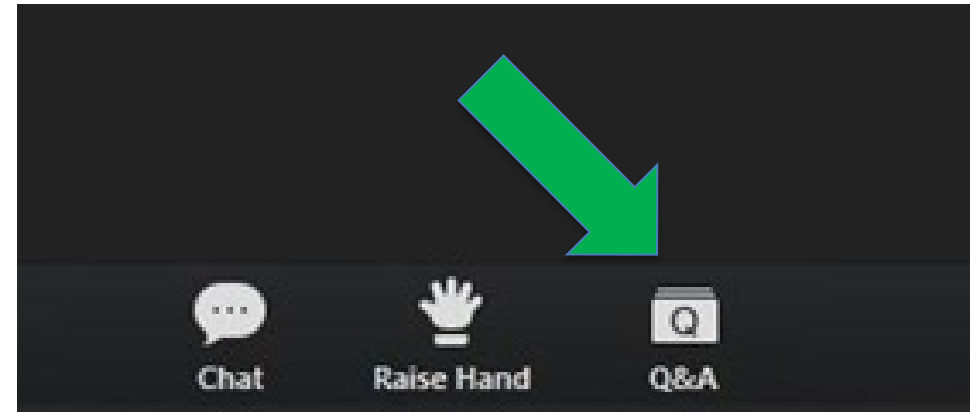
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## Bob Allen



Bob is the Founder of Solve for Why, LLC, a consultancy delivering professional services to global technology companies and enterprises. Bob leverages over 25 years in computing and semiconductors to assist those in need of external expert business insights to help guide corporate, go-to-market and product strategy. Prior to founding Solve for Why, Bob held numerous technical, sales, business and market development roles at Arm Holdings, the world's most pervasive computing technology supplier. Bob holds a BS in Physics from the University of Redlands.



## Max Petrenko



Max Petrenko is a Principal Scientist at Amazon and is interested in enabling TinyML transformation across core industries. Prior to Amazon, Max led NLP teams working on on-device applications in search, conversational AI, multimodal AI and life sciences. Max's other areas of interest include computational creativity and disruptive technologies. Max holds a Ph.D. degree in Computational Linguistics from Purdue University.





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